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High Speed Rail (West Midlands - Crewe)

Environmental Statement

Volume 5: Technical appendices

CA1: Fradley to Colton

Cultural heritage baseline report (CH-001-001)

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Department for Transport

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Contents

1 Introduction

1.1 Structure of the cultural heritage appendices

1.1.1 The cultural heritage Appendices for the Fradley to Colton community area (CA1) comprise:

- a baseline report (this Appendix);
- a gazetteer of heritage assets (Volume 5: Appendix CH-002-001);
- an impact assessment (Volume 5: Appendix CH-003-001); and
- survey reports, incorporating geophysical survey and remote sensing studies, which are available in the Background Information and Data document[1].

1.1.2 In addition there are two route-wide cultural heritage Appendices:

- a historic landscape character report (Volume 5: Appendix CH-005-000); and
- a geoarchaeology desk study report (Volume 5: Appendix CH-006-000).

1.1.3 Maps referred to throughout the cultural heritage Appendices are contained in the Volume 5: Cultural Heritage Map Book.

1.2 Study area

1.2.1 The Fradley to Colton area lies within the districts of Lichfield, East Staffordshire and Cannock Chase, within the County of Staffordshire. It contains all or part of the civil parishes of Fradley and Streethay, Alrewas, Kings Bromley, Yoxall, Curborough and Elmhurst, Longdon, Armitage with Handsacre, Hamstall Ridware, Mavesyn Ridware, Abbots Bromley, Brereton and Ravenhill, Rugeley, Colton and Blithfield.

1.2.2 All non-designated and designated assets within the land required for the Proposed Scheme and within 500m of it have been detailed in this baseline report. In addition, designated heritage assets have been examined within the zone of theoretical visibility (ZTV).

1.2.3 All identified assets are listed in Volume 5: Appendix CH-002-001 Gazetteer of heritage assets and shown in Cultural Heritage Map Series CH-01-201 – CH-01-205a-R1 and CH-02-201 to CH-02-202a (Volume 5: Cultural Heritage Map Book).

1.3 Data sources

1.3.1 Sources examined as part of this baseline assessment include published secondary sources, cartographic sources, Historic Environment Record (HER) data for non-designated heritage assets and the Historic England National Heritage List (NHL) for designated assets. A full list of published sources can be found in Section 8 of this Appendix.

[1] HS2 Ltd (2017), *High Speed Two (HS2) Phase 2a (West Midlands - Crewe), Background Information and Data, Cultural heritage survey report*, BID-CH-004-001, www.gov.uk/hs2

1.4 Survey undertaken

1.4.1 The following surveys were undertaken as part of the environmental impact assessment (EIA) process:

- light detection and ranging (LiDAR) survey of the majority of the land required for the Proposed Scheme and land around it (see BID-CH-004-001 Cultural heritage survey reports);
- a programme of non-intrusive surveys including geophysical prospection (see BID-CH-004-001); and
- field walkover, targeted field walking, and site reconnaissance field inspections to review the setting of historic assets and the character and form of the historic landscape.

2 Geology, topography and landform

2.1 Overview

2.1.1 The solid geology of the study area is dominated by rocks formed during the Triassic period (251 – 250 million years ago) at a time when almost all of the Earth's landmass was concentrated into the Pangea super-continent. These rocks largely comprise red, and less commonly green and grey, mudstones, siltstones and halites of the Mercia mudstone group. They are distributed widely across the study area, with the exception of Rugeley. Here, deposits of Bromsgrove sandstone predominate, interbedded with sandstone and pebble conglomerates of the Kidderminster Formation. These deposits are part of the Sherwood Sandstone Group and form the remainder of the Triassic sequence.

2.1.2 Solid geology within the study area is partially overlain by superficial deposits formed during the Quaternary period (2.5 million years ago) as a consequence of the repeated advance and retreat of the ice sheets. The study area is close to the margins of the last major ice sheet to have affected mainland Britain during the late Devensian period (approximately 30,000 – 15,000 Before Present (BP)), which largely removed evidence of earlier ice sheet activity and associated palaeodrainage. The majority of surviving superficial deposits are likely to be more recent, although isolated remnants of earlier deposits may be present. Superficial geology can be divided into three main deposit types: 1) glaciofluvial sands and gravels, including glacial outwash and river terrace deposits; 2) till; and 3) Holocene alluvium.

2.1.3 Sands and gravels are present within the study area along the southern edge of the Trent Valley. These comprise fluvioglacial sands and gravels distributed from Fradley to Handsacre, likely to have been deposited by seasonal meltwater outwash at the edge of the Devensian ice sheet, or as outwash deposits as the ice sheet retreated. Pleistocene terrace deposits are more widely distributed from Fradley through Rugeley to Colton along both sides of the River Trent. These are relatively modest in extent compared to similar terrace deposits within the middle and lower Trent Valley. The earliest evidence for river terrace formations in the Upper Trent area dates to the end of the Anglian glaciation, approximately 450,000 years ago[2]. The lowest river terraces were deposited during the Devensian glaciation, with isolated surviving fragments of higher terraces within the study area possibly dating to earlier pre-Devensian glaciations.

2.1.4 During the repeated advance of glaciers, deposits of poorly sorted tills (previously termed boulder clays) were laid down by ice sheets, most recently during the latter stages of the Devensian Ice Age (approximately 30,500 – 13,500 BP) when the Irish ice sheet expanded to cover the study area. Till deposits are widespread throughout the Trent Valley region, but are present within the study area as small deposits located around Blithbury. As suggested above, the precise southern limit of the Devensian ice sheet is a matter of debate, and therefore some of the superficial glacial deposits within the study area could date to earlier glacial episodes between the Anglian and Devensian periods.

[2] Bridgland, D.A., Howard, A.J., White, M.J. and White, T.S (2014), *The Quaternary of the Trent*, Oxford: Oxbow Books

2.1.5 Deposits of Holocene alluvium are present where former and extant river tributaries cut across the study area and the route of the Proposed Scheme. The first of these run along the course of the current Pyford Brook from near the Alrewas Hayes countryside venue to near Willow Cottage where the Pyford Brook then splits to form the Full Brook and Curborough Brook. A second deposit follows the course of the Bourne Brook running south-west from Riley Hill to the A515 Lichfield Road. The route of the Proposed Scheme then crosses the substantial alluvial deposits of the River Trent east of Kings Bromley. There are also limited deposits of alluvium associated with the course of the Moreton Brook near Stockwell Heath.

2.1.6 The geology of the study area supports a range of acid to neutral loamy and clayey soils of low to moderate fertility, largely used for arable along with areas of pasture, grassland and patches of deciduous and coniferous woodland. The most fertile soils are to be found within the valley of the River Trent, with more acid loamy soils developed on a range of parent material including Pleistocene sands and gravels, till and the Triassic period bedrock.

2.1.7 The route of the Proposed Scheme within the study area is situated within a low-lying and gently undulating landscape. Between Fradley and Hill Ridware the route varies little between approximately 60 – 70m above sea level (ASL), thereafter gentling increasing in elevation to approximately 100m ASL by Stockwell Heath.

2.1.8 In summary, the form and historic character of the present-day landscape within the study area is determined primarily by geological processes, particularly during the Quaternary period, when successive glaciations scoured and deposited sediment across large parts of the landscape. Both the solid and superficial geologies have heavily influenced post glacial soil development in the region and the vegetative cover and land-use history of the study area. The River Trent remains a defining feature of the landscape, containing significant deposits of Pleistocene sands and gravels and Holocene alluvium with significant archaeological and palaeoenvironmental potential.

2.2 Geoarchaeological characterisation

2.2.1 The following geoarchaeological characterisation zones (GCZ) have been identified within the Fradley to Colton area (see Volume 5: Appendix CH-006-000 Geoarchaeology desk study report).

- GCZ 1 – comprises sands and gravels classified by the British Geological Survey as mid-Pleistocene glaciofluvial sheet deposits, which are most likely to represent Pleistocene river terrace deposits associated with the River Trent. They are located between Fradley and Handsacre.
- GCZ 2 – comprises a thin band of alluvium associated with the course of Pyford Brook.
- GCZ 3 – comprises river terrace deposits of sand and gravel associated with the River Trent that are likely to date to the last Cold Stage (Devensian).
- GCZ 4 – comprises a narrow band of alluvium associated with Bourne Brook and Pleistocene river terrace deposits.

- GCZ 5 – comprises Pleistocene river terrace deposits associated with the River Trent, which probably date to the most recent Devensian glacial stage.
- GCZ 6 – comprises Holocene alluvium associated with the course of the River Trent.
- GCZ 7 – comprises Pleistocene river terrace deposits on the northern bank of the River Trent between its confluence with the River Blithe west to Hill Ridware.
- GCZ 8 – comprises slightly acid loamy and clayey soils developed on Mercia Mudstone solid geology, sparsely overlain by superficial deposits of glacial till in the eastern part of the zone.
- GCZ 9 – comprises freely draining slightly acidic soils formed on Bromsgrove Sandstone Formation, and slightly acid base-rich loamy and clayey soils developed on areas of Mercia Mudstone across half of the zone. The other half is covered by superficial deposits of glacial till.
- GCZ 10 – comprises a ribbon of alluvium associated with the Moreton Brook.
- GCZ 11 – principally comprises slightly acidic loamy and clayey soils developed on Mercia Mudstone, with a band of alluvium along Moreton Brook.
- GCZ 12 – principally comprises slightly acidic loamy and clayey soils developed on Mercia Mudstone, with a small area of alluvium associated with the course of Moreton Brook.
- GCZ 13 – comprises Holocene alluvium associated with the course of the Moreton Brook.

3 Archaeological and historical record

3.1 Introduction

3.1.1 This section provides a chronological overview of the wider archaeological context of the study area. This is intended to enable the potential for unidentified archaeological remains to be assessed, and their likely location and form to be identified.

3.1.2 Descriptions of all identified cultural heritage assets are presented in Volume 5: Appendix CH-002-001; and shown in Cultural Heritage Map Series CH-01-201 – CH-01-205a-R1 (Volume 5: Cultural Heritage Map Book).

3.2 Early prehistory

Palaeolithic 500,000BC – 10,000BC

3.2.1 Palaeolithic finds comprise the archaeological and environmental remains of early human societies occupying Britain during the interglacial periods occurring before, between and immediately after the three successive glaciations: Anglian, Wolstonian and Devensian. Throughout the Palaeolithic, Britain was joined to continental Europe by a land bridge (known as 'Doggerland').

3.2.2 Three successive but overlapping species of humans occupied Britain during the Palaeolithic: *Homo heidelbergensis* and *Homo neanderthalensis* from approximately 230,000 years ago and, from approximately 40,000 years ago, anatomically modern man, *Homo sapiens*. Early humans used a succession of evolving stone tool technologies comprising sharpened flint flakes struck from cores and handaxes. Stone tools used by *Homo heidelbergensis* defined the Lower Palaeolithic, those by *Homo neanderthalensis* the Middle Palaeolithic, and those by *Homo sapiens* the Upper Palaeolithic.

3.2.3 The recent discovery of Lower Palaeolithic flint-flake tools alongside the bones of scimitar-toothed cat, lion and hyena at Happisburgh and Pakefield on the East Anglian coast has pushed back the date of the first confirmed early human occupation of Britain to around 700,000 years ago, during the Cromerian interglacial[3]. During the Lower Palaeolithic, Happisburgh and Pakefield would have been located on the northern and southern edges respectively of the delta of the Bytham River, which flowed through north-east Warwickshire and drained the southern part of the River Trent catchment to the East Anglian coast. The Bytham River preceded and was subsequently erased by the Anglian glaciation.

3.2.4 Lower Palaeolithic artefactual evidence of early human occupation in the West Midlands, found in sediments laid down by the Bytham River, dates to the pre-Anglian Cromerian interglacial (500,000 years ago). Significant finds have been made at Waverley Wood, to the north of Warwick, where an assemblage of five handaxes and bones of a straight-tusked elephant were found in organic deposits filling a former

[3] Barton, N. (2009), The Lateglacial or Latest Palaeolithic occupation of Britain, in Hunter, J. and Ralston, I., eds., *The Archaeology of Britain: an introduction from earliest times to the twenty-first century*, Abingdon: Routledge, pp. 19-20; Stringer, C. (2006), *Homo britannicus: the incredible story of human life in Britain,* London: Penguin Books, ch. 1

river channel[4]. This association of early remains with rivers suggests that animals and early humans would have moved along riparian corridors for access to water and food.

3.2.5 The River Trent may already have been in existence before the Anglian glaciation. Sediments either side of the Ancaster Gap in Lincolnshire suggest the river came into existence approximately 400,000 years ago[5]. However, the River Trent upstream of Alrewas may have originated as a glacial outwash stream during the Devensian glaciation, between approximately 110,000 and 12,000 years ago. The gravel terraces that flank this part of the River Trent would have been laid down at this time. The Devensian ice sheet is thought to have extended as far south as the River Trent-River Sow confluence. Conditions are likely to have been too cold for human occupation in Staffordshire until after approximately 12,000 years ago[6]. As a result, locations with high-potential for preserved evidence of early human activity, which may survive within the Trent Valley, are likely to be of Late Upper Palaeolithic date. Older remains of hardy animals may also survive. Examples of woolly rhinoceros, wolves, mammoth, horse, reindeer and bison have been recovered from a quarry at Whitemoor Hay, to the east of the study area. These remains were dated to approximately 30,000 years ago[7]. The gravel terraces of the River Trent, upstream of Alrewas, may contain unstratified artefacts of older date, disturbed and redeposited by the glacier and its outwash streams, while older undisturbed deposits may survive to the south of the glacier. These could contain older, in-situ archaeological or palaeoenvironmental remains. Superficial geological deposits south of Rileyhill are thought to be of Lower or Middle Palaeolithic date and could contain archaeological and environmental remains of this date[8].

3.2.6 A total of 451 Lower, Middle and Upper Palaeolithic artefacts have been recovered from Trent Valley sediments, though none of these has been found upstream of Alrewas[9]. No artefacts of Lower or Middle Palaeolithic date have been found anywhere in Staffordshire to date. Upper Palaeolithic artefacts have been recovered, but these are associated with cave sites in the north-east of the county. Well-preserved, in-situ Palaeolithic archaeological and Palaeolithic environmental remains are rare and usually deeply buried; consequently, when encountered they are deemed to be of moderate or high value.

Mesolithic 10,000BC – 4,000BC

3.2.7 At the end of the last Ice Age, Britain was still connected to the European mainland by the Doggerland land bridge. Rapid climate change led to the replacement of late-glacial tundra by birch and pine and subsequently, by much denser mixed deciduous woodland comprising oak, alder, willow, hazel and elm. Environmental evidence suggests that this process in the West Midlands spanned the period from

[4] Garwood, P. (2011), The earlier prehistory of the west midlands, in: S. Watt, ed., *The Archaeology of the west midlands: a framework for research*, Oxford: Oxbow Books, 16; Lang, A. and Buteux, S. (2007), Lost But Not Forgotten: the Lower and Middle Palaeolithic occupation of the West Midlands, in Garwood, P, ed., *The Undiscovered Country: the earlier prehistory of the West Midlands*, Oxford, Oxbow Books, pp. 6-22
[5] Knight, D. and Howard J. (2004), *Trent Valley Landscapes: The Archaeology of 500,000 Years of Change*, King's Lynn: Heritage Marketing and Publications Ltd, p. 12
[6] Bridgland et al. (2014); Myers, A. (2007), The Upper Palaeolithic and Mesolithic Archaeology of the West Midlands, in Garwood, P. ed. *The Undiscovered Country: the earlier prehistory of the West Midlands*, Oxford, Oxbow Books, pp. 23-38
[7] Buteux, S. and Chapman, H. (2009), *Where Rivers Meet: the archaeology of Catholme and the Trent-Tame confluence*, York: CBA Research Report 161, pp. 42-44
[8] British Geological Survey – Geology of Britain Viewer, http://mapapps.bgs.ac.uk/geologyofbritain/home.html
[9] Bridgland et al. (2014)

approximately 9,500/8,500BC to 7,200/7,000BC[10]. Doggerland also facilitated colonization of Britain by red and roe deer, aurochs, boar, elk, wild pig and horse.

3.2.8 The material record of the Mesolithic in Britain comprises mostly lithic assemblages, though structural and organic remains have been identified. Early Mesolithic (before approximately 6,500BC) flint tool assemblages are typically of broad-blade type, adapted to large-game hunting. After 6,500BC, Late Mesolithic assemblages are of narrow-blade type, suitable for a more diverse range of hunting and processing tasks[11].

3.2.9 Very little systematic collection of artefacts from the surface of ploughed fields has been undertaken across the West Midlands and Staffordshire. Where systematic survey has been undertaken, it has demonstrated a concentration of occupation during the Mesolithic in well-drained elevated terrain, close to water sources[12]. The Trent Valley river terraces comprise well-drained sandy loam soils. As a result, the River Trent and various watercourses that flow into it, including the Curborough Brook, Bourne Brook and the Crawley Brook, would have offered a range of essential resources. A diffuse scatter of worked flint, including Mesolithic or Early Neolithic cores, flakes and blades, was recovered during fieldwalking over two fields to the north of Rake End (FRC105[13]). Valley floor locations are likely to be underrepresented in the artefactual and palaeoenvironmental record, as a result of being buried beneath, and potentially preserved by, later alluvium and colluvium[14].

Neolithic 4,000BC – 2,200BC

3.2.10 During the Early Neolithic (approximately 4,000BC - 3,400BC) domesticated animals (cattle, sheep and pigs) and plant species (principally wheat and barley) were introduced into Britain from the continent, resulting in a gradual transition from a mobile hunter-gatherer lifestyle to one of sedentary cultivation. There remains much debate at the national level as to the speed of this process and to what extent it was the product of acculturation or colonization. In the West Midlands, evidence suggests very gradual acculturation, in that woodland persisted to at least 2,500BC, with little clearance and little cereal cultivation before that date[15].

3.2.11 It is in this context that excavations along the line of the M6 Toll found some limited evidence of tree clearance, cereal cultivation and presumably domestic occupation during the Early Neolithic outside the study area close to the settlement of Wall. Part of a carinated bowl, likely to date to approximately 3,700cal BC[16] was found in a tree hollow at Shenstone, and is likely to date tree clearance at that location. Two pits found at another location at Shenstone contained Early Neolithic bowl pottery, hazelnut shells and four grains of barley and emmer or spelt wheat. The barley grain yielded a radiocarbon date of 3,710 - 3,530cal BC. Peterborough Ware bowl pottery of Mortlake variety was also found closer to Wall, and is likely to date to 3,350 - 2,900cal

[10] Garwood (2011), p.27
[11] Garwood (2011), p. 26
[12] Myers, A. (2007), p. 31; Garwood (2011), p. 27
[13] Asset reference numbers throughout refer to the Unique Identifier provided for each asset in the gazetteer (Volume 5:Appendix CH-002-001)
[14] Knight and Howard (2004), p. 38; Myers (2007), p. 31
[15] Buteux and Chapman (2009), p. 60
[16] Calibrated years Before Christ

BC[17]. A polished Neolithic flint axe head found at Alrewas Hayes in 1939, within the study area, may indicate contemporary tree clearance, while a diffuse scatter of worked flint including Mesolithic or Early Neolithic cores, flakes and blades was found during fieldwalking over two fields to the north of Rakes End (FRC105).

3.2.12 The Early Neolithic is characterised by the emergence of communal burial in long barrows and of a tradition of monumental communal meeting places that were perhaps also ceremonial centres, in the form of causewayed enclosures. These are ditched enclosures, roughly circular, oval or ovoid in plan, with the ditch or ditches dug in discontinuous lengths with undug sections between. Although there are no known long barrows in or around the study area, there is cropmark evidence of an oval single-ditched causewayed enclosure within the study area to the north of Glebe Farm, Kings Bromley (FRC044) to the south of the River Trent. A second, slightly larger ovoid enclosure (also in FRC044) survives as a cropmark approximately 130m to the west of the above causewayed enclosure, approximately 40m outside the study area and may also be of Neolithic date, although its single ditch would appear to be continuous rather than interrupted suggesting it is more likely to be of later prehistoric date. A triple-ditched causewayed enclosure survives as a cropmark at Mavesyn Ridware to the north of the River Trent, while a morphologically similar example survives as a cropmark to the west of Alrewas, also in the Trent Valley[18]. It is likely that these communal meeting places served Neolithic communities living within the Trent Valley, although not necessarily living within the study area.

3.2.13 During the Middle Neolithic (approximately 3,400BC - 2,800BC), causewayed enclosures went out of use and were replaced by cursus monuments. There are two possible cursus monuments a short distance from the study area in the Trent Valley: one at Hill Ridware, approximately 675m north of the Mavesyn Ridware causewayed enclosure, and another at Alrewas. There is a third example at Catholme, at the River Trent – River Tame confluence, approximately 5.5km to the east of the study area.

3.2.14 The Late Neolithic (approximately 2,900BC - 2,100BC) is particularly associated with henges, stone and timber circles and oval barrows, which were often combined to form ceremonial landscapes. A ring ditch superimposed upon a square feature visible on aerial photographs approximately 125m outside the study area and 530m west-south-west of Pipe Ridware Hall (FRC075), on the north bank of the River Trent, is thought to represent a Late Neolithic mortuary enclosure and barrow (FRC075).

3.2.15 A ceremonial landscape developed at Catholme, at the River Trent – River Tame confluence, in this period. In addition to the cursus monument referenced above, there is a hengi-form monument, a circular monument comprising radiating lines of pits (dubbed the 'sunburst monument' by its excavators), which was dated by radiocarbon assay to 2,580cal BC - 2,460cal BC. A ring ditch with central beaker burial had been inserted into the centre of this monument in approximately 2,000BC. A monument comprising 39 radiating lines of post pits forming five concentric rings,

[17] Powell, A.B., Booth, P., Fitzpatrick A.P., and Crockett, A.B. (2008), *The Archaeology of the M6 Toll 2000-2003*, Oxford Wessex Archaeology Monograph No. 2, p. 504

[18] Barber, M. (2007), The Blank Country? Neolithic enclosures and landscapes in the West Midlands, in P. Garwood, ed., *The Undiscovered Country: the earlier prehistory of the West Midlands*, Oxford, Oxbow Books, pp. 79-96

resembling Woodhenge in Wiltshire, is also present. Radiocarbon determinations on charcoal from the post pits indicate it was constructed in approximately 2,500BC[19].

3.2.16 Cropmark sites recorded on the gravel terraces of the River Trent in and around the study area would appear to contain a wealth of Early Bronze Age round barrows and extensive field systems and enclosures of later prehistoric date. It is possible that some of the undiagnostic features visible at these locations will also be of Neolithic date.

3.3 Late prehistory

Bronze Age 2,600BC – 700BC

3.3.1 At the end of the Neolithic, the ceremonial landscapes comprising communal monuments ceased to be maintained. These were replaced, initially, by single-phase circular burial mounds that contained single crouched inhumations with ceramic beakers and occasionally copper daggers and gold ornaments (though rarely in the West Midlands) with few or no secondary burials. From approximately 2,200BC, multiphase round barrows were constructed in the West Midlands, which saw iterative structural elaboration and which contained multiple secondary burials. Initially, the regional burial practice was mixed, but later became standardized as urned and unurned cremation. The earliest barrows appear to have celebrated individuals, and the later ones lineages. The pace of round barrow construction in the West Midlands increased rapidly from approximately 1,900BC.

3.3.2 A pair of possible ring ditches is present within the study area. These are the circular remains of levelled barrows representing the remains of the quarry ditch that ran around the outside of, and provided the spoil for the creation of a burial mound. These sites, of probable Bronze Age date, are located on the northern side of the Curborough Brook (FRC18), and a third possible ring ditch approximately 500m to the north between the Curborough Brook and Ashby Sitch watercourse (part of FRC019). There are a further three ring ditches south of Kings Bromley Wharf (FRC021). An extensive multi-period cropmark complex running along both sides of the Bourne Brook (FRC020) contains a dispersed spread of approximately 20 complete or substantially complete ring ditches and a similar number of what would appear to be partially complete ring ditches of probable Bronze Age date. There is a single ring ditch to the south-east of Echills Farm, Kings Bromley, located within a square enclosure of possible Iron Age date (both FRC029). This may be an outlier to the dispersed barrow cemetery that straddles the Bourne Brook. Further to the north, straddling the unnamed watercourse that runs north, north-east past Tuppenhurst, is a barrow cemetery comprising 12 ring ditches (FRC040). Seven lie to the north of the watercourse and five to the south. A sixth ring ditch in the southern group formerly lay to the south of the watercourse but was removed by aggregate extraction in the former Kings Bromley Manor Park during the late 20th century.

3.3.3 North of the River Trent, two ring ditches are visible within the study area in fields to the east of Pipe Ridware Hall (FRC074), with another pair found to the west of

[19] Buteux and Chapman (2004), ch. 5.; Woodward, A. (2007), Ceremonial Landscapes and Ritual Deposits in the Neolithic and Early Bronze Age Periods in the West Midlands, in P. Garwood, ed., *The Undiscovered Country: the earlier prehistory of the West Midlands*, Oxford, Oxbow Books, pp. 182-193

Nethertown (FRC109). A single ring ditch survives as a cropmark in the field to the west of Wheelwright Cottage, Pipe Ridware (FRC077), and the cropmark complex in the next field to the west (FRC075) contains another ring, which lies just within the study area. A possible ring ditch is visible in a cropmark complex, including linear boundaries and pits, to the north of Pipe Ridware (FRC084). This would seem to correspond to a circular ditch recorded during the archaeological monitoring of the construction of the Audley to Alrewas gas pipeline[20], which had an internal diameter of only approximately 7m and contained three charcoal-filled pits. It is unclear whether this feature formed the remains of a roundhouse or round barrow. Features once identified as an enclosure and four adjacent ring ditches to the north of Pipe Ridware are now thought likely to be of modern origin (FRC086). The four 'ring ditches' are in a ruler-straight line, lie edge to edge and are all approximately 9m in diameter; they do not appear to be of archaeological interest; more likely representing the sequential locations of a circular animal feeder. The final ring ditch lies to the south of Bentley Hall Cottage (FRC094) and may be associated with a heavily corroded copper alloy axehead, or tool such as a chisel, found approximately 450m to the east during metal detecting to the south of Bentley Hall Farm.

3.3.4 There is virtually no direct evidence of Early Bronze Age settlement in the West Midlands and none within the study area. However, it has been suggested that ring ditches in river terrace locations were sited close to occupation sites or on marginal land bordering settlement areas[21]. There are a number oval and rectangular and elliptical enclosures (some pit-defined) in the multi-period cropmark complex at Bourne Brook (FRC020) that could be settlement related and could be of Bronze Age date.

3.3.5 In the Middle Bronze Age (approximately 1,500BC - 1,000BC), round barrow burial gave way to cremation burial in flat cemeteries. Although there are no certain examples of such a cemetery in or around the study area, features seen as cropmarks on aerial photographs immediately beyond the study area to the west of Pipe Ridware (FRC075) have been interpreted as the possible remains of a cemetery and could be of this date.

3.3.6 Four burnt mounds, identified along the Moreton Brook within the study area to the north-west of Colton, are likely to date to the period 1,700cal BC - 1000cal BC, if they follow the pattern of similar sites investigated elsewhere in the West Midlands[22]. It has been argued, in a West Midlands' context, that burnt mounds pertain to steam bathing, that the burnt mound represents the location of the fire on which the stones were heated, and that a sweat-lodge structure would typically be located up to 10m from the mound and might be indicated by deposits of charcoal-free heat-shattered stones. It has further been hypothesized that contemporary settlement may be anticipated on slightly higher and drier ground, perhaps within 50m of the burnt mound in any direction[23].

[20] Network Archaeology (1998), *Audley to Alrewas Gas Pipeline Archaeological Watching Brief,* Vol. I, unpublished report, pp. 14-20
[21] Garwood (2011), p. 75
[22] Hodder, M. (2017), Burnt mounds and beyond: the later prehistory of Birmingham and the Black Country, in D. Hurst, ed., *Westward on the High-Hilled Plains: The Later Prehistory of the West Midlands,* Oxford: Oxbow Books, pp. 29-36
[23] Hodder (2017)

3.3.7 Although no firm evidence of Bronze Age land division is known within the study area, some of the pit alignments visible on the Trent Valley gravels, and described in more detail below, could be of Middle or Late Bronze Age date.

Iron Age 800BC – AD43

3.3.8 The landscape beyond the study area would appear to have been divided up with physical boundaries for the first time in the Middle Iron Age. At Whitemoor Haye and Catholme Farm, at the River Trent – River Tame confluence, just beyond the study area, a series of pit alignments ran back from the River Tame at right angles to it and divided the landscape in to a number of blocks that would have contained the full range of resources stretching back from the river to higher ground. The pit alignment at Whitemoor Haye contained Iron Age pottery from primary and secondary fills and a radiocarbon date of 400 - 150 cal BC[24]. Two sherds of Middle Iron Age pottery were found in a pit alignment at Wishaw Hall Farm along the M6 Toll[25]. Further afield, pit alignments at Ling Hall Quarry at Lawford Heath, Warwickshire, are clearly dated to the Iron Age[26]. These examples suggest that in the West Midlands, pit alignments date to the Middle Iron Age, even though nationally they are thought to have been constructed earlier and over a longer time period, stretching from the Middle or Late Bronze Age through to the Early Iron Age.

3.3.9 Settlement also becomes more visible in the region during the Iron Age, as it is enclosed for the first time. Enclosures are typically rectilinear and contain the ring-gully remains of roundhouses. A rectilinear settlement enclosure excavated at Site 29 on the M6 Toll, measuring approximately 70m by 70m, contained six roundhouses. Radiocarbon dates indicate occupation from the 4th to 2nd century BC. A similar enclosure approximately 500m to the south-east (Site 30), measuring approximately 30m by 30m, contained one roundhouse[27]. A rectilinear enclosure excavated at Fisherwick at the River Trent – River Tame confluence measured approximately 52m by 42m and contained two roundhouses. The enclosure ditch yielded Scored Ware pottery of Iron Age date. The lack of evidence for a post ring supporting the roundhouses suggested to the excavators at Fisherwick that the roundhouses may have been of mud wall construction[28].

3.3.10 A number of single pit alignments are present within the study area. These run parallel and at right angles to the Bourne Brook, dividing the land into a number of enclosures (FRC020 and FRC021). Several alignments are intercutting, indicating phases of land use. A number of continuous ditches abut and extend some of the pit alignments in this area (FRC020). These abutments and extensions may be later additions, may have been preceded by pit alignments and may be part of the same system of land division. There are many other continuous boundary ditches and ditched trackways (and a trackway defined by a double pit alignment) within the cropmark complex at the Bourne Brook (FRC020). Some of these may be of Iron Age or Roman date, while others may derive from medieval assarting and post-medieval piecemeal enclosure.

[24] Buteux and Chapman (2004), pp. 102-106
[25] Powell et al. (2008), p. 360
[26] Powell et al. (2008), p. 512
[27] Powell et al. (2008), pp. 510-511
[28] Buteux and Chapman (2009), pp. 110-116

3.3.11 A number of enclosures defined by pit alignments, including a two-celled rectangular enclosure measuring approximately 125m by 100m, two probable oval enclosures and an elliptical one, are present within the cropmark complex at the Bourne Brook (FRC020). These may all be of Iron Age date but some could be earlier. A group of rectangular enclosures defined by continuous ditches to the east of Shaw Lane (FRC020) and an enclosure to the west of Shaw Lane Farm (FRC029) are likely to be of Iron Age or Roman date, as are three rectangular enclosures between the Bourne Brook and Ashby Sitch (FRC019). These continuous ditched enclosures are of a similar size to those excavated along the line of the M6 Toll road and at the River Trent – River Tame confluence and could, like them, be settlement enclosures.

3.3.12 A number of pit alignments are present from south-west of Echills Farm north to the River Trent. These are predominantly running north-south (FRC035, FRC036, FRC038 and FRC044) but with some short alignments running east-west (FRC037 and FRC042). FRC036 and FRC038 were originally a single pit alignment approximately 1km long, but are now divided by Kings Bromley Lane. This combined alignment appears to stop approximately 300m south of the River Trent but may, in fact, continue further north, but be masked by alluvium. One of the pits comprising the alignment within FRC044, near Glebe Farm, can be seen to cut one of the component ditches of the causewayed enclosure within FRC044. With the possible exception of a single rectangular enclosure north-east of Handsacre (FRC039), which is likely to be of Iron Age or Roman date, there is no cropmark evidence of settlement activity in the vicinity of these pit alignments. It is possible that the area was used for agricultural purposes at this time.

3.3.13 A cropmark complex to the west of Pipe Ridware Hall (FRC075) to the north of the River Trent and partially within the study area contains a pit alignment of probable Iron Age date and numerous pits thought to be possible graves that may also be of Iron Age date. To the north of Pipe Lane and west of Parva House are the cropmark remains of a square ditched enclosure measuring approximately 4.5m by at least 6m internally that would appear to be the remains of an Iron Age square barrow adjacent to some sinuous boundaries of probable Iron Age or Roman date (FRC083). Some or all of the pits and ditches, and the possible ring gulley excavated to the north of Parva House, Pipe Ridware (FRC084), could be of Iron Age date, as could a possible curvilinear and a possible rectilinear enclosure (FRC090) observed on ESRI World Imagery in December 2016 to the east of Woodhouse Farmhouse, north of Pipe Ridware.

3.3.14 Finally, a square ditched enclosure measuring approximately 67m by 57m internally, visible as a cropmark on aerial photographs to the west of Pipe Wood (FRC095) is most likely to be of Iron Age or Roman date.

3.3.15 The frequency in the appearance of cropmarks in the Fradley to Colton area reflects the findings of the 'Where Rivers Meet' project. The project concluded that the wider landscape around the confluence of the Rivers Tame and Trent comprised a ritual landscape during prehistory. The cropmark complexes found within the Fradley to Colton would suggest a continuation of this landscape. Taken in their entirety these cropmarks constitute a nationally significant resource with the potential to enhance our understanding of prehistory in this region.

3.4 Romano-British AD43 – AD410

3.4.1 It has been suggested that the West Midlands may have been a resource procurement zone for the army, with the extraction of its minerals and the production of timber, pottery and agricultural produce being controlled for supply to the army garrisons in Wales and the north-west of Roman Britain[29]. The investigations at the River Trent – River Tame confluence as part of the 'Where Rivers Meet' project corroborated this suggestion in respect of that location's agricultural produce. However, its investigators proposed that its ultimate or perhaps intermediate destination was nearer at hand: Roman Wall (*Letocetum*)[30].

3.4.2 Wall originated as a Roman fort along Watling Street, a military road that ran via London through Wroxeter (the capital of the civitas of the Cornovii[31]) and on into Wales. The study area likely lies at the very eastern edge of the civitas Cornoviorum. A slightly later Roman road (Ryknield Street) crossed Watling Street to the east of Wall and ran along the western side of the River Tame and River Trent to Littlechester and beyond. Wall lies approximately 7.5km to the south of the study area, while Ryknield Street is within approximately 2.2km of it.

3.4.3 A civilian settlement or vicus developed at Wall. At its height it stretched for approximately 1km along Watling Street. In its heyday, it contained a bath house and mansion, high-status residences and industrial areas. Wall would likely have drawn in produce from a wide hinterland, both for internal consumption and for wider distribution within Roman Britain. Three of Staffordshire's seven confirmed Roman villas are found to the west of Ryknield Street between Wall and the confluence of the River Trent and the River Tame and so may have influenced agricultural production within the study area.

3.4.4 At the River Trent – River Tame confluence archaeological excavations have demonstrated that the Iron Age landscape of fields defined by pit alignments and given over to mixed agriculture, alongside enclosed settlement sites, was superseded in the early Roman period by rectilinear and D-shaped enclosures. These enclosures appear discontinuously along one or other side of, and usually abutting, a double-ditched trackway. Some ephemeral settlement remains were excavated at Fisherwick, which implied only seasonal occupation. This was interpreted to mean that farming was directed by people who lived elsewhere; probably in the villas close by or at Wall. This would imply that the produce identified within the Trent-Tame confluence was being removed for consumption or trade at those locations[32].

3.4.5 Within the study area, there are no examples of clearly Romanised buildings (such as villas) visible in the cropmarks within the Trent Valley, and none has been identified by any other survey type. Rectilinear enclosures, defined by continuous ditches visible as cropmarks on the Trent Valley gravels within FRC019, FRC020, FRC029 and FRC039, the possible cropmark enclosures east of Woodhouse Farmhouse (FRC090) and the rectilinear cropmark enclosure to the west of Pipe Wood (FRC095) could be entirely of

[29] Esmonde Cleary, S. (2011), The Romano-British period: an assessment, in: S. Watt, ed., *The Archaeology of the west midlands: a framework for research*, Oxford: Oxbow Books, pp. 127-147
[30] Buteux and Chapman (2009)
[31] A civitas is a Roman local government administrative unit based on a pre-Roman tribal grouping, here the Cornovii
[32] Buteux and Chapman (2009), pp. 135-146

Roman date or could straddle the Iron Age-Romano British transition. Some of the cropmark field boundaries visible on the River Trent gravels (FRC019, FRC020, FRC021, FRC030, FRC032, FRC033, FRC034, FRC041, FRC075, FRC083 and FRC084) could also be of Roman date. A mortarium (mixing bowl) dating to approximately AD 100 found in a pit to the east of Shaw Lane Farm indicates some activity of Roman date within the area of the cropmark complex at the Bourne Brook (FRC020).

3.5 Early medieval AD410 - AD1066

3.5.1 Staffordshire is thought to have been located within the territory of the Cornovii in the Romano-British period, though the boundary with the Corieltauvi to the east is likely to have followed the River Trent and the River Tame a short distance to the east of the study area. Careful excavation at Wroxeter, the capital of the Cornovii, has revealed that organised life continued there until approximately AD 500, though the area under its control is unlikely to have extended as far east as Staffordshire at that time[33].

3.5.2 Written documents such as charters and the Tribal Hidage (a 7th or 8th century Mercian or Northumbrian tribute list suggest that at the end of the Roman period, political power fragmented into numerous small British and Anglo-Saxon polities, which gradually formed a smaller number of Anglo-Saxon and British kingdoms from the late 6th century. One such polity or folk grouping was the Tomsaetan, based in and around the Tame Valley, whose territory may have encompassed the study area to the south of the River Trent[34]. It has been suggested that tribal groups whose name contained the suffix 'saete' may have been of British origin[35]. On the northern bank of the River Trent and extending across the study area, there appears to have been a second British folk group resident throughout the Ridwares (which is likely to have been a single territory or district at that time[36]), since the place name Ridware means the dwellers ('ware') by the 'Rhyd', from the British word for ford. The 'ware' place name element is Anglo-Saxon, so the name was presumably coined by Anglo-Saxon settlers at a time when Anglo-Saxon and British groups coexisted in the landscape[37]. These conditions are perhaps most likely to have occurred during the later 7th and earlier 8th centuries. It is not known for certain where within this district (Hamstall Ridware, Pipe Ridware or Mavesyn Ridware) the British community resided.

3.5.3 In the late 6th or the early 7th century, Staffordshire was incorporated into the newly formed Anglo-Saxon kingdom of Mercia. The Tribal Hidage and the writings of Bede make it clear that Staffordshire formed part of 'Original Mercia', that is part of Mercia before its expansion in the 8th century, when it asserted control over much of central and southern England[38]. In spite of the fact that the Mercian kingdom was officially pagan until the reign of Peada (655 – 656), archaeology would seem to support the place name evidence in suggesting that Staffordshire was culturally British when incorporated. This is suggested by the almost complete absence of pagan Anglo-

[33] White, R. and Barker, P. (1998), *Wroxeter: Life and Death of a Roman City*, pp. 118-136
[34] C. Welch (pers comm) (2017)
[35] Hooke, D. (2011), The post-Roman and the early medieval periods in the west midlands: a potential archaeological agenda, in: S. Watt, ed., *The Archaeology of the West Midlands: A Framework for Research*, Oxford: Oxbow Books, p. 153
[36] Palliser, D. M. (1976), *The Staffordshire Landscape,* London: Hodder and Stoughton, pp. 56-57
[37] Gelling, M. (2000), *Place-Names in the Landscape*, London: Phoenix Press, pp. 79-80
[38] Phillips, A.D.M. and Phillips, C.B. (2011), *An Historical Atlas of Staffordshire*, Manchester: Manchester University Press, p. 30; Brooks, N. (1989), The formation of the Mercian kingdom, in Bassett, S., ed., *The Origins of the Anglo-Saxon Kingdoms*, London: Leicester University Press, pp. 160-163

Saxon cemeteries in the county, with the exception of a cluster located along the west bank of the River Trent where it borders Derbyshire. Pagan cemeteries are found at Stapenhill in Burton-on-Trent, Barton and Walton in the Trent Valley, and at Tuckleholme Farm and Wychnor at the River Trent – River Tame confluence[39]. The only other certain pagan burial in Staffordshire, with the exception of a group in the Staffordshire Peak District (part of a Derbyshire concentration), is a single, isolated burial found at Barlaston[40].

3.5.4 In 669, Wilfrid, Bishop of York, built a cathedral at Lichfield on land granted for this purpose by the Mercian King Wulfhere, and Chad was appointed bishop. It has been suggested that the adoption of Anglo-Saxon culture and the English language by families living in the vicinity of Lichfield would have started in earnest at this time for reasons of social advancement and perhaps even personal safety[41].

3.5.5 It has been suggested that Wilfrid may have thought that Lichfield was an appropriate place for an episcopal seat in part because it was already the centre of a vast multiple estate in the 7th century[42]. Multiple estates comprised a number of dependent specialist settlements supplying produce to an estate centre or 'caput' such as Lichfield. Domesday Book of 1086 records that the manor of Lichfield had 15 dependent settlements (berewicks), one of which was Pipe Ridware (Handsacre was another)[43]. This may support the place-name evidence and indicate that Pipe Ridware was already in existence by 669 and was one of the dependent settlements contained within the multiple estate granted to Wilfrid by Wulfhere at that date.

3.5.6 The locations of any other broadly contemporary settlement sites within the study area are not known, though place name evidence suggests some potential sites. The place name element '-ley' typically means either woodland, woodland clearing or settlement in a woodland environment, and its floruit would appear to have been between approximately 750 and 950[44]. Place names containing the '-ley' element within and adjacent to the study include Fradley, Rileyhill, Crawley, Kings Bromley, Bentley and Hamley, which may indicate settlement of this date within an otherwise well-wooded landscape[45].

3.5.7 In 874, moving up the River Trent and its tributaries from their base at Repton in Derbyshire, the invading Danes overran the heartland of Mercia and the independent Kingdom of Mercia soon ceased to exist[46]. The study area lay on the frontier of the Danelaw in the early 10th century. Aethelflaed, 'Lady of the Mercians' and eldest daughter of Alfred the Great, had a fortified burh built at Stafford in 913. It was located on a promontory surrounded by marshes in a bend of the River Sow, and was presumably intended to hold the central lowlands of Staffordshire against a Danish

[39] Gelling, M. (1992), *The West Midlands in the Early Middle Ages*, London: Leicester University Press, pp. 29-30
[40] Gelling (1992), pp. 29-30
[41] York, B. (2001), The Origins of Mercia, in Brown M.P. and Farr C.A., eds., *Mercia: An Anglo-Saxon Kingdom in Europe,* London: Leicester University Press, p. 21
[42] Gelling (1992), p. 96
[43] Williams, A and Martin, G.H. (1992), *Domesday Book: a complete translation,* London: Penguin, p. 676
[44] Phillips and Phillips (2011), p. 28
[45] C. Welch (pers comm) (2017)
[46] Palliser (1976), p. 49

thrust along the River Trent and River Sow[47]. It would appear to have achieved its objective, because there are no Scandinavian place names within the study area[48].

3.5.8 Domesday records settlements present by the end of the early medieval period at locations in and around the study area including Kings Bromley, Hamstall Ridware, Pipe Ridware, Mavesyn Ridware and Colton.

3.6 Medieval AD1066 – AD1540

3.6.1 Staffordshire was an underdeveloped county at the start of the medieval period. It has been calculated, using the area of woodland recorded for each manor in Domesday Book, that 32% of the land area of Staffordshire was under woodland in 1086[49]. Many of the manors that already existed in 1086 were small; the number of peasant families would grow fivefold at Kings Bromley by 1300[50]. Pipe Ridware had arable land for only one plough in 1086, while many settlements in and around the study area, that would come to flourish later in the medieval period, are not recorded in Domesday. These include Blithbury (first referenced in surviving documents in the first half of the 12th century), Curborough (first recorded in the 13th century), Rake End (first recorded in 1334) and Hill Ridware (first recorded in 1346)[51].

3.6.2 The medieval period divides naturally into two halves. From the 11th until the mid 14th century, the population of the country doubled, existing settlements expanded and new ones were formed. Much woodland and wasteland was brought into agricultural production. From 1348 to 1520, repeated outbreaks of plague reduced the population of England by a third, precipitating social and economic change, which in turn caused economically and socially weaker settlements to shrink and some to become deserted.

3.6.3 Medieval and post-medieval England are typically divided into two broad character areas by landscape historians: champion and woodland. Champion landscapes predominated across a strip of the country running north-east from Somerset to County Durham, including the East Midlands. Woodland landscapes predominated in the east and west of the country, including the West Midlands. In champion landscapes, each parish usually contained a single settlement, typically a nucleated village, and much of the agricultural land in the parish was divided into two or three large open fields, farmed communally. Farmhouses were located in the village. Champion landscapes typically contained little woodland or permanent pasture. Animals, principally used for traction, grazed upon whichever of the open fields was lying fallow that year. Woodland landscapes frequently comprised more than one settlement in any parish. A number of nucleated settlements were present within and around the study area by the 14th century including Hamstall Ridware, the hamlet of Nethertown, Mavesyn Ridware, Hill Ridware, Rake End hamlets, Pipe Ridware (at Quintons Orchard and at Pipe Ridware Hall) and Colton. There may have been other isolated settlements. Landscape evidence suggests that open field agriculture was practiced in woodland landscapes, with a two- or three-field communal system

[47] Palliser (1976), p. 50; Zaluckyj, S. (2001), *Mercia: The Anglo-Saxon Kingdom of Central England,* Logaston: Logaston Press, pp. 214-216
[48] Horovitz, D (2005), *The Place-Names of Staffordshire,* Brewood: David Horovitz
[49] Rackham, O. (1996), *Trees and Woodland in the British landscape*, London: Phoenix Giant, pp. 50-53
[50] Dyer, C. (2000), Woodlands and Wood-Pasture in Western England, in Thirsk, J., ed., *The English Rural Landscape,* Oxford: Oxford University Press, p. 111
[51] Horovitz (2005)

practiced throughout Staffordshire. Separate systems may have operated in parishes that contained multiple settlements and it is likely that open field agricultural systems operated beside enclosed fields that were farmed individually. Woodland landscapes typically contained reserves of pasture and woodland that could be brought into agricultural use as the population expanded and they contained a much higher incidence of moats than champion districts. Moats are thought to have been dug my manorial lords and prosperous freeholders as status displays (though they also provided security and functioned as fish ponds) principally from the 12th to the mid 14th century. There are two moats at Pipe Ridware and one at Handsacre. Woodland landscapes also had a higher incidence of deer parks and rural industry; there were two deer parks and a glass production site at Colton[52]. The Staffordshire landscape in general, and the study area in particular, was a woodland landscape[53].

3.6.4 At the start of the medieval period the study area south of the River Trent was mostly covered with woodland. Domesday records that the manor of Lichfield contained woodland measuring "...8½ leagues and 7 furlongs long and 6½ leagues and 8 furlongs broad..."[54], which equates to approximately 378km^2 or 37,814 hectares. Some of this woodland will have lain within the study area, as will a portion of the Domesday woodland at the manors of Kings Bromley and Alrewas, which each had woodland measuring 1 league long by half a league broad[55], equating to approximately 291 hectares each. From the late 11th or early 12th century, this part of the study area lay within the medieval forest of Cannock, from which Cannock Chase was carved and granted by the Crown to the Bishop of Lichfield as a private forest in 1290[56].

3.6.5 At Kings Bromley, 15 peasant households were recorded in Domesday in 1086. There were approximately 202 hectares of arable land and 291 hectares of woodland, as well as extensive pastures. By 1300, documentary evidence shows that the number of peasant families had increased fivefold to more than 80, the woodland held by the lord had shrunk to as little as 8 hectares, and more than 405 hectares of arable land were now under cultivation. The vast majority of the woodland had been grubbed up ('assarted') and converted to arable land. Some of the newly cultivated land may have been added to the communally farmed open field system that operated at Kings Bromley, but the land parcels held by 30 peasants for very low rents of less than one penny are likely to have been enclosed and farmed individually[57]. It is likely that some of the cropmark complexes indicative of field systems within the study area to the south of the River Trent will derive from the conversion of woodland to arable cultivation between the 11th and 14th centuries. This suggestion is supported by the place name Echills, which now attaches to a 19th century farmstead (FRC166) within the study area to the south of Kings Bromley and which sits amongst the field system cropmarks: Echills derives from the Old English word 'ecels', which means land added to an estate by reclamation[58]. Most of the peasants at Kings Bromley held land measured in virgates or yardlands (approximately 12 hectares), representing the old

[52] C. Welch (pers comm) (2017)
[53] Rackham, O. (1986), *The History of the Countryside*, London: Dent, pp. 4-5; Dyer (2000), pp. 97-99; Roberts, B.K. and Wrathmell, S. (2000), *An Atlas of Rural Settlement in England*, London: English Heritage, pp. 55-56; notes on the tract of land between the Ridwares and the Haywoods, supplied by Chris Welch, Inspector of Ancient Monuments, Historic England, 10/02/2017
[54] Williams, A. (1992), *Domesday Book: a complete translation, London: Penguin, p. 676*
[55] Williams (1992), p. 673
[56] Palliser (1976), pp. 67-68
[57] Dyer (2000), p. 111
[58] Horovitz (2005), p. 243

cultivated lands farmed in the 11th century, supplemented by any land added to the open field system by reclamation. These peasants are likely to have lived in Kings Bromley village. The tenants of the small land parcels who had little or no stake in the open field system may have lived amongst the newly reclaimed lands in the study area, although their dwellings have not yet been identified, particularly where they supplemented their incomes with a woodland craft. The surnames of some of the peasants who held those small land parcels suggest that they did just that, men such as John le Colyere (charcoal burner) and Thomas le Couper (barrel-maker)[59].

3.6.6 Pipe Ridware, on the northern bank of the River Trent, was a berewick (dependent settlement) attached to the Manor of Lichfield in 1088, when it had arable land for a single plough. It was then known as Media or Parva Ridware. It came into the possession of the Pipe family in 1286 (when it acquired its current name), when Robert de Pipe married Maud, the daughter of Thomas de Thamenthorne[60]. Pipe Ridware contains the remains of two rectangular medieval moats, one at Quinton's Orchard (FRC088), on high ground to the north-west of the hamlet of Pipe Ridware, and one to the immediate west of Pipe Ridware Hall (FRC076). The moat at Quinton's Orchard (FRC088) survives as a wet ditch at its south-eastern angle and two adjacent ponds, and as a cropmark elsewhere. The moat would have enclosed a platform measuring approximately 450m^2. Ridge and furrow earthworks were formerly present within the moat and are visible on aerial photographs; the moat now contains a 20th century steel farm building and an area of hardstanding. The moat west of Pipe Ridware Hall (FRC076) now survives only as a cropmark, but once comprised two concentric rectangular embanked enclosures, with an external ditch that ran along their western side, which was fed by a leat running west to Bentley Brook.

3.6.7 Stebbing Shaw, writing in the late 18th century, was of the opinion that the moat at Quinton's Orchard (FRC088) contained the manor house of Robert de Pipe, and was then called Pipehalle[61]. The Staffordshire HER monument report for Pipehalle states that the moat at Quinton's Orchard may have contained the hall of Ralph de Linacre, in the reign of Henry II (1154 - 1189).

3.6.8 The moat to the immediate west of the present Pipe Ridware Hall was thought by Stebbing Shaw to have contained the house of a family called Attewater or Bywater, so called because they lived beside the River Trent. Stebbing Shaw thought that the Attewaters/Bywaters were a family of freeholders who were contemporaries of the de Pipes, resident at Quinton's Orchard[62].

3.6.9 There is no documentary or cropmark evidence that the hamlet of Pipe Ridware, along with its church, was formerly located adjacent to the manor house at Quinton's Orchard, and geophysical survey undertaken as part of this project has failed to identify any evidence of settlement in the field to the east of the manorial moat. It would appear that the focus of settlement and worship at Pipe Ridware always lay between Pipe Ridware Hall and the Church of St James.

[59] Dyer (2000), p. 111
[60] Shaw, S. (1798), *The History and Antiquities of Staffordshire*, Vol. I, London: J Nichols & Son, p. 162
[61] Shaw (1798), p. 166
[62] Shaw (1798), p. 166

3.6.10 The current Church of St James (FRC080) is of 19th century construction, but is on the site of a 17th century church depicted by Stebbing Shaw. The square churchyard (also FRC080) also contains the remains of a 14th century cross shaft (also FRC080), while the church formerly contained a Norman font of 11th or 12th century date, which was removed to Hamstall Ridware church when the Church of St James went out of use in the 1980s. The Norman font suggests that a church was present within the current churchyard in Pipe Ridware not later than the 12th or 13th century.

3.6.11 Earthworks (FRC82) formerly observed in the field to the north-west of the moated site located to the immediate west of Pipe Ridware Hall have been suggested to represent former house platforms associated with the medieval settlement of Pipe Ridware, which is likely to have shrunk in the later medieval period as a direct result of the plague, or as a result of the economic and social changes it wrought.

3.6.12 The 'Hall' element in the name Bentley Hall Farm, in Mavesyn Ridware parish and within the study area, suggests that the current farm, of 18th century date (FRC092), is on the site of a medieval hall house. It would appear that this farm is referenced in a document of 1277[63]. Alternatively, Bentley Hall Cottage (FRC093), built in 1700 and associated with a 17th century barn (also FRC093), may mark the site of a medieval settlement focus.

3.6.13 There are two entries in Domesday for Colton, which would appear to have described three manors. Part of the village had been given by William the Conqueror to Roger de Montgomerie, first Earl of Shrewsbury and the other part to Robert of Stafford. Earl Roger de Montgomerie had let his land to Azelin, while Robert of Stafford's land was held by Geoffrey. Azelin's descendants were the Mavesyns, while Geoffrey's were the de Wasteneys[64].

3.6.14 Azelin's holding contained land for four ploughs, approximately 8 hectares of meadow and approximately 194 hectares of woodland. It included 18 peasants (14 villeins and four slaves) and a priest (and therefore a church, one of the few recorded in Domesday Staffordshire). If each of the 18 peasants was part of a household containing five people, Azelin's holding contained 90 peasants and a priest. This holding was worth 40 shillings in 1086[65]. Azelin's land would appear to have comprised two manors: one that came to be known as Church Manor, which is thought to have been located near the church; and Littlehay Manor, which was located on or close to the site of the Tudor Little Hay Manor[66], the chimney of which survives in the northern part of the village (FRC124), close to the 19th century Little Hay Manor Farmhouse (FRC123).

3.6.15 Geoffrey's holding comprised land for six ploughs, 10 villein households and that of one slave (perhaps 55 people in total), approximately 6.5 hectares of meadow woodland 1 league long by 3 furlongs broad (approximately 146 hectares), and a water mill[67]. Geoffrey's holding is thought to have extended from the village to the River Trent, where the mill was located. Geoffrey's holding was worth 50 shillings in 1086. Colton therefore had a combined value of 90 shillings and contained approximately

[63] Horovitz (2005), p. 114
[64] Sykes, G., Carter, S. and Bradbury, D. (2008), *Colton: History of a Staffordshire Village*, Colton: Colton History Society
[65] Williams (1992), p. 678
[66] Sykes, Carter and Bradbury (2008)
[67] Williams (1992), p. 681

145 persons in 1086, which made it one of the most populous and valuable villages between Stafford and Lichfield[68].

3.6.16 In 1235 Sir Philip de Wasteney was granted a licence to hold a weekly market at Colton and in 1264 the de Wasteneys obtained a licence to impark (that is, to create a deer park), and created what became known as the Old Park, to the north of Newlands Lane (FRC130). In some places, the outline of the park is fossilized as a continuous line of field boundaries; elsewhere, the park pale is well preserved and up to 5.5m wide and 1.5m high, with an outer ditch measuring approximately 3m wide and 1m deep. In approximately 1290, the de Wasteneys built a windmill on a field called Hamley; its precise location has yet to be identified[69].

3.6.17 The site of a probable medieval glass-making furnace (FRC134) has been identified by geophysical survey at Lount Farm, Colton, supported by the recovery of a crucible and glazed stone on the site. One or more glass-making furnaces would appear to have been active at this location during the period 1300 - 1550, and possibly in the earlier part of that range. The furnaces would have required ready access to a reliable supply of woodland for fuel[70].

3.7 Post-medieval AD1540 - AD1901

3.7.1 During the post-medieval period, the Staffordshire landscape became increasingly enclosed. Some of the land cleared of trees and taken into cultivation between the 11th and 14th centuries is likely to have been enclosed from the beginning, but during the medieval period most of the agricultural land in any given parish was divided into two or three communally farmed open fields, each farmer holding strips of land scattered more or less evenly across the fields. The open fields of Staffordshire were primarily enclosed piecemeal, through consolidation of holdings achieved through exchange and purchase. Field systems derived from piecemeal enclosure predominate throughout the study area to the north of the River Trent. The chronology of the process of piecemeal enclosure is not known in detail, because the transactions to achieve it were not usually recorded. Nevertheless, as land holdings were consolidated and the open fields were enclosed, farms that were hitherto located primarily in villages and hamlets migrated outwards to sit amidst their now consolidated holdings. The date of the dispersed farmsteads may therefore cast light on the chronology of piecemeal enclosure within the study area. Isolated farmsteads such as Hunger Hill Farmhouse (FRC111), the earliest fabric at Woodhouse Farmhouse (FRC089) and Hamley House (FRC127) are all of 17th century date and suggest the process was well underway if not almost complete by the close of that century. At least part of the open field system that had operated at Hamstall Ridware survived the piecemeal enclosure process, only to be enclosed by act of parliament in 1815. Elsewhere within the study area, acts of parliament were used principally to enclose areas of waste across which common rights extended, such as at Kings Bromley in 1799 and Alrewas in 1810.

[68] Sykes, Carter and Bradbury (2008)
[69] Sykes, Carter and Bradbury (2008)
[70] Notes on the tract of land between the Ridwares and the Haywoods, supplied by Chris Welch, Inspector of Ancient Monuments, Historic England, 10/02/2017

3.7.2 The post-medieval period was a time of agricultural improvement. Throughout the study area north of the River Trent and particularly around Colton, the remains of marl pits survive as ponds or shallow depressions. Marling involved digging pits through the relatively acidic topsoil down to alkaline subsoil, which was extracted and spread upon arable fields to reduce acidity and increase fertility. Marling had a long history, but was perhaps practiced most during the 18th century[71].

3.7.3 A second type of agricultural improvement, the water meadow, was common in Staffordshire. The date of their introduction to the county is not known, but they are likely to have flourished primarily in the 18th and 19th centuries. Various water meadow systems operated across the country, but in Staffordshire the 'bedwork' system would appear to have predominated. In this system, a leat ('main carrier') taken off a watercourse some distance upstream fed water into channels ('carriers') that ran along the tops of parallel ridges. The water overtopped the drains and flowed continuously down the sides of the ridges ('panes') into drains in the corresponding furrows, which returned it to the river. The artificial inundation of grassland by these means with continuously flowing water during winter raised the ground temperature sufficiently to stimulate an early growth of grass, which reduced the need for winter fodder. Furthermore, once the flocks had moved onto summer pastures in May, supplementary irrigation could produce substantial secondary hay crops in June or July[72].

3.7.4 Water meadows existed within the study area to the north of Kings Bromley (FRC073), south of Pipe Ridware (FRC072), north of Colton (FRC126) and at Lount Farm, Colton (FRC132). Earthworks associated with the first three of these systems would appear to survive in vestigial form across only part of the systems, or survive only as cropmarks. However, at the Lount Farm water meadow main carriers and carriers and/or drains can be seen to survive as cut features on ESRI World Imagery accessed during December 2016 throughout the northern quarter of the water meadow system.

3.7.5 As trade and industry expanded in the 18th century, a network of canals was built to reduce the cost of transporting raw materials, such as coal, flint and clay, to manufacturing centres, such as the north Staffordshire Potteries, and to reduce the cost of transporting finished goods to market. The Trent and Mersey Canal (FRC008), designed by James Brindley, was supported by Josiah Wedgewood, as well as salt producers in Cheshire, brewers in Burton-on-Trent, iron and coal merchants in Staffordshire and cheesemongers in Derbyshire, Staffordshire and Cheshire[73]. It was authorised in 1766 and it opened in 1777. It links the River Trent at Derwent Mouth (Derbyshire) to the River Mersey, via the Bridgewater Canal, which it joins at Preston Brook, in Cheshire. The need to link Liverpool with London led to the building of the Oxford and Coventry canals. The Coventry canal (FRC006), authorized in 1768 and completed in 1789, joins the Trent and Mersey Canal within the study area at Fradley Junction (FRC007).

3.7.6 Although the Staffordshire canals served the raw material suppliers and the manufacturers of the industrial revolution, throughout most of their length they

[71] Williamson, T. (2002), *The Transformation of Rural England: Farming and the Landscape 1700 - 1870,* Exeter: University of Exeter Press, p.67

[72] Williamson, T. (2002), p. 59; Breeze, P., Challis, K. and Kincey, M. (2008), *Staffordshire Water Meadows Survey,* pp. 6-9

[73] Lindsay, J. (1979), *The Trent and Mersey Canal*, London: David & Charles, p. 11

crossed a rural landscape that, within the study area, has changed little since their construction and primary use. They introduced into the landscape a complex network of bridges, locks, lock-keepers cottages, warehouses, canal-side factories and mileposts, examples of which survive and retain their original character within the study area.

3.7.7 An alternative and contemporary means of freight and passenger transport was provided by turnpike roads, constructed during the 18th and 19th centuries. The lines of four turnpike roads cross the study area: High Bridges to Uttoxeter turnpike road (FRC024), Lichfield to Kings Bromley, Yoxall and Handsacre turnpike road (FRC063), and the Rugeley and Alrewas turnpike road (FRC062). No associated toll houses survive within the study area and none of the turnpike roads retain any of their historic character.

3.8 Modern AD1901 - present

3.8.1 Several of Staffordshire's country houses ceased to be domestic residences during the 20th century. Within the study area, Kings Bromley Manor (FRC066) was demolished in 1928 and 85 per cent of its landscape park (FRC064) lost to gravel extraction and the construction of a golf course in the late 20th century. Bellamour Hall, a short distance to the south of the study area at Colton was demolished, whereas the nearby Bellamour Old Hall (FRC119) fell into decay and was partially demolished in the 1960s.

3.8.2 RAF Lichfield (FRC004), known locally as Fradley Airfield, was constructed between 1939 and 1940 at the southern end of the study area. It was initially used as a maintenance depot, but from 1941 was used to train aircrews for bombing operations using Wellington bombers. After the war, the airfield was returned to its role as a maintenance depot until 1958 when it closed and sold. As Fradley Park, the site has now been developed for industrial units and over 750 new homes. Several aircraft hangars survive to the south of the study area; however, the part of the former RAF base that extends into the study area now comprises agricultural land and woodland.

3.8.3 Historic map regression shows that Kings Bromley village extended outwards beyond its historic core initially on a small scale towards the middle of the 20th century and then on a much greater scale from the 1960s and 70s. Colton also extended outwards, particularly to the north of Littlehay Manor Farmhouse, in the 1970s. However, Pipe Ridware saw little or no expansion during the 20th century.

3.8.4 In the middle and later years of the 20th century, the increased mechanisation of farming led to the amalgamation of many previously small fields and the consequential loss of historic hedgerows and landscape character, particularly at and to the north of Pipe Ridware.

4 Built heritage

4.1 Introduction

4.1.1 This section provides baseline information relating to all built heritage assets within the land required for the Proposed Scheme; all designated and key non-designated built heritage assets within 500m of the land required for the Proposed Scheme; and any built heritage assets that lie between 500m and 2km from the land required for the Proposed Scheme and within the ZTV of the Proposed Scheme, where the Proposed Scheme will have adverse effects of moderate or major significance.

4.1.2 Further information on all these assets, plus any designated assets that lie between 500m and 2km of the land required for the Proposed Scheme and within the ZTV, but are not described below, can be found in Volume 5: Appendix CH-002-001.

4.1.3 All assets are depicted in Cultural Heritage Map Series CH-01-201 – CH-01-205a-R1 and CH-01-202b – CH-02-201 to CH-02-202a (Volume 5: Cultural Heritage Map Book).

4.2 Built heritage assets within the land required for the Proposed Scheme

Fradley Junction Conservation Area (FRC007)

4.2.1 The conservation area covers the junction of the Trent and Mersey Canal and the Coventry Canal, and associated buildings and structures, all of which are included within FRC007. It contains five listed 1770s locks and bridges: Hunts Lock, Bridge 50 and Keeper's Lock, Bridge 51 and associated lock, Middle Lock, and Bridge 52 and Shade House Lock. Other buildings within the conservation area are the 18th century Swan Inn and attached buildings, and a Wharf House, cottages and workshops, all of 19th century date and all listed for group value. Each of these buildings and structures is listed at Grade II and each lies within the study area. Also included in this group are a non-designated 19th century cottage adjacent to Keeper's Lock, which may have been the lock-keeper's cottage, and a non-designated milepost.

4.2.2 The setting of the asset is characterised by an enclosed, tree-lined area, with views focussed mainly inwards towards the junction of the canals, but also outwards along the Trent and Mersey Canal (see Figure LV.01.621 in Volume 5: Appendix LV-001-001 Landscape and visual assessment and photomontages) and less so the Coventry Canal. The wider setting comprises a primarily rural landscape, although some modern intrusion is present in the form of a holiday park immediately adjacent to the junction to the north and industrial units further to the south-east.

The contribution setting makes to the significance of the asset

4.2.3 The asset derives its significance primarily from the surviving historic fabric of the canals, the locks and the buildings, which lie within the conservation area and the spatial and historic relationship between them. The layout of the junction and its approaches alongside and on the canal are key elements of the significance of the asset. The asset's wider setting adds little to its significance as a heritage asset, as outward views from the junction do not represent designed or intended views, these are incidental by virtue of the route the canal takes.

Trent and Mersey Canal Conservation Area (FRC008)

4.2.4 The Trent and Mersey Canal is approximately 93.5km long, and joins the River Trent at Derwent Mouth in Derbyshire and the River Mersey via the Bridgwater Canal at Preston Brook in Cheshire. It was authorised by Act of Parliament in 1766, and its construction was completed in 1777. The conservation area enters the study area north-west of Fradley, and exits it north-west of Kings Bromley Wharf. Buildings and structures along this section of the canal comprise a milepost (FRC009), Bridge 53 and Woodend Lock (FRC010), Woodend Lock Cottage (FRC011), a viaduct over the canal (FRC200) and Bridge 64 off Armitage Road, Rugeley (FRC201), each listed at Grade II, and the non-designated Kings Bromley Wharf and Kings Bromley Bridge (FRC023). Each of these buildings and structures is separately described and assessed in this report; this entry pertains only to the parts of the conservation area between these discrete assets.

4.2.5 The canal lies within a primarily rural landscape setting with some sections running through industrial areas including Rugeley, where the canal was used for transporting coal. Much of the rural landscape has changed little since the construction and initial use of the canal. Tow paths that are used as public footpaths provide important access to the canal, from which the historic character of the structures and peaceful landscape setting can be appreciated.

The contribution setting makes to the significance of the asset

4.2.6 The significance of the canal primarily lies in its historic fabric and its importance as a feature from the industrial revolution; its spatial and historic association with the buildings that lie along it; and through its physical relationship with the landscape through the extensive utilisation of the natural topography by its engineers.

4.2.7 The asset derives some significance from its setting due to its route through the rural landscape. Views along the canal are of primary significance (see Figures LV.01.621 and LV.01.622 in Volume 5: Appendix LV-001-001), but views outward across agricultural fields also contribute to the significance of the asset, where they are afforded by gaps in the trees that line the canal along most of its length within the study area (see Figure LV.01.506 in Volume 5: Appendix LV-001-001). However, it should be noted that outward views from the canal do not represent designed or intended views; these are incidental by virtue of the route the canal takes.

Shaw Lane Farmhouse (FRC071)

4.2.8 Late 19th century farmhouse present on the 1884 edition 1:2,500 Ordnance Survey map located beside Shaw Lane. The adjoining open fronted cart shed now used as a garage is also depicted. The farmhouse faces south onto a farmyard fringed with outbuildings built in the earlier 20th century. Both farmhouse and farm buildings were comprehensively renovated in the 21st century and the later were converted to business use.

4.2.9 The immediate setting of the asset is defined by the farm complex, which includes historic buildings and larger modern sheds and is bounded to the north by mature trees. A large regular woodland lies to the north-west with the surrounding wider landscape comprising large fields.

The contribution setting makes to the significance of the asset

4.2.10 The significance of the asset primarily lies in the surviving historic fabric of the farmhouse, in its farmyard and the relationship between these features that form its immediate setting. The asset derives some limited significance from its wider rural landscape setting.

Cranberry, Streethay (FRC148)

4.2.11 A 19th century cottage visible on historic maps, which is aligned east-west and faces south.

4.2.12 The setting of the asset is defined by its location within a small area of woodland close to the Trent and Mersey Canal surrounded by areas of woodland and agricultural land.

The contribution setting makes to the significance of the asset

4.2.13 The value of the asset lies in the surviving historic fabric of the cottage and its immediate setting within the woodland.

19th century milepost on the A515 Lichfield Road, Kings Bromley (FRC050)

4.2.14 A 19th century triangular milepost manufactured from cast iron by Chas-Lathe of Tipton located on the south-east side of the A515 Lichfield Road. The milepost gives distances to Kings Bromley, Lichfield, Yoxall, Marchington, Sudbury and Ashbourne.

4.2.15 The setting of the asset is defined by its location and relationship with the A515 Lichfield Road.

The contribution setting makes to the significance of the asset

4.2.16 The value of the asset lies entirely in its fabric and its immediate setting adjacent to the A515 Lichfield Road.

4.3 Designated and key non-designated built heritage assets within 500m of the land required for the Proposed Scheme

Trent and Mersey Canal milepost listed Grade II (FRC009)

4.3.1 The milepost is painted black and white, is of cast-iron construction and is circular in section, and has a moulded head. Beneath the head are two convex tablets; one is inscribed "Shardlow 26 miles" the other, "Preston Brook 66 miles". Toward the base of the post is a date plaque, which records "R & D Stone 1819".

4.3.2 The setting of the asset is entirely focussed on the canal.

The contribution setting makes to the significance of the asset

4.3.3 The significance of the asset lies entirely in its fabric and its location along the canal.

Trent and Mersey Canal Bridge Number 53 and Trent and Mersey Canal Woodend Lock (FRC010)

4.3.4 The Trent and Mersey Canal Bridge Number 53 and Trent and Mersey Canal Woodend Lock are both of late 18th century date aside from the lock gates, which are 20th century replacements. The bridge has a single arch and is of red brick construction with sandstone detail, including a sandstone block beneath the parapet inscribed "57". The lock lies to the north of the bridge with both accessed along a single trackway originating at Woodend Farm to the south.

4.3.5 The setting of the asset is defined by its location adjacent to the Trent and Mersey Canal Woodend Lock Cottage and to the canal itself. The wider setting of the bridge and the lock is a rural landscape of agricultural land and sporadic woodland to the north-east.

The contribution setting makes to the significance of the asset

4.3.6 The significance of the asset is defined by its historic fabric and the spatial and historic relationship between the canal and the lock cottage. This localised area represents the primary setting of the asset, which also includes views up and down the canal and to either side. The wider setting contributes little to its significance.

Trent and Mersey Canal Woodend Lock Cottage (FRC011), each listed Grade II

4.3.7 Woodend Lock Cottage was formerly the lock-keeper's cottage, and lies adjacent to the lock and the bridge across the canal to the west. It is of brick construction, painted white and dates to the late 18th century.

4.3.8 The setting of the asset is defined by its location adjacent to the Trent and Mersey Canal Bridge 53 and Lock and to the canal itself, and by its access along a historic trackway from Woodend Farm. Historic views from the cottage are focused up and down the canal, but also out towards the rural landscape to the north-east.

The contribution setting makes to the significance of the asset

4.3.9 The interrelationship of these structures and their relationship to the canal and its towpath makes a fundamental contribution to their significance, although views up and down the canal and across the surrounding countryside also add some significance to the asset.

Alrewas Hayes Farmhouse, Alrewas (FRC017), Grade II listed

4.3.10 An early 18th century L-shaped farmhouse of two storeys constructed from red brick, which is located at the apex of a U-shaped access road. Historic mapping indicates access to the farmhouse was along the southern arm of the current road. The principal range of the farmhouse is aligned east-west and faces south across the surrounding rural landscape. Historic mapping indicates the farm was originally laid out around a series of courtyards to the north. Some of the original buildings survive, although others have been replaced with large modern ranges.

4.3.11 The immediate setting of the asset is defined by the farm complex, which comprises other historic but non-designated assets that are contemporary with the asset as well

as the more modern structures. The asset's wider setting comprises the surrounding rural landscape with the main elevation facing to the south. The asset also has an important relationship to its historic access, which is still used as its driveway.

The contribution setting makes to the significance of the asset

4.3.12 The value of the farmhouse is derived from its fabric and its historic layout including its relationship to other surviving buildings within the farmyard complex and the continued use of its historic access. In addition, the asset derives some value from its isolated setting within the wider rural landscape.

Woodend Common Barn (FRC016), non-designated

4.3.13 A late 19th century barn with modern alterations including a modern roof. The barn is ranged around a central yard and is part of a group of buildings within a working farm that includes modern agricultural buildings. It is located close to the Trent and Mersey Canal sheltered by a small area of woodland to its north-west with an immature plantation to its immediate north.

4.3.14 Its setting is considered to be defined by its spatial and historic relationship to the other buildings of the farm of which it is a part within a farmyard context. It lies in a wider agricultural landscape defined by enclosed fields laid down in the 19th century and by the late 18th century canal.

The contribution setting makes to the significance of the asset

4.3.15 The asset is considered to be significant because of its architectural and historic interest as expressed in its fabric. The immediate farmyard setting provides an appropriate context within which the special interest of the asset can be appreciated. However, this interest, as expressed in its fabric, is best appreciated in close proximity as part of the farm.

Common Farm, Kings Bromley Wharf (FRC163), non-designated

4.3.16 A number of 19th century buildings with modern alterations and extensions within a working farm. Despite their alteration, the older buildings retain a significant portion of their historic character. The farm is located close to the Trent and Mersey Canal and accessed via a long, hedge-line driveway, which links to the A515 Lichfield Road and other small trackways in the immediate area and is surrounded by enclosed fields. The main elevation of the farmhouse is its south-west elevation, which looks out over its tree lined front garden towards the immediate surrounding fields and small woodland approximately 165m away.

4.3.17 The setting of the farm is considered to be defined by the spatial and historic relationship the farm buildings have with each other and its historic access represented by the driveway towards the A515 Lichfield Road. The farm lies in a wider rural landscape.

The contribution setting makes to the significance of the asset

4.3.18 The value of the asset lies within the surviving historic fabric of the farm buildings; their relationship with each other, which is best appreciated in close proximity; and the relationship between the farm and its historic access, which can be appreciated by

using this access route to the farm. The wider setting of the asset is therefore not considered to make a meaningful contribution to the asset's significance.

Kings Bromley Canal Wharf and Bridge (FRC023), non-designated

4.3.19 The asset comprises a wharf and bridge on the Trent and Mersey Canal at Kings Bromley, and a group of red brick buildings of 19th and 20th century date that stand adjacent to the wharf, which formed a creamery that used the canal to distribute its produce. The buildings include a group of workers' cottages.

4.3.20 The setting of the wharf and bridge is defined by the canal and the relationship of it to the buildings and of the buildings to each other. Views up and down the canal also contribute to the setting of the asset.

The contribution setting makes to the significance of the asset

4.3.21 The significance of the asset is gained from the historic fabric of the asset, the retention of its original industrial character and its focus upon the wharf. The asset gains little significance from its wider setting although views of the asset from the bridge to the wharf, and north and south along the canal from the towpath opposite are important.

Rileyhill Farm, Kings Bromley Wharf (FRC164), non-designated

4.3.22 A 19th century farmhouse and ancillary buildings that are arranged around three sides of a central yard, with historic mapping indicating the majority of buildings were in-situ in 1884.

4.3.23 The setting of the asset is primarily focussed upon the farmyard complex and the garden to the north-west of the farmhouse. The farm is located within a broadly rural landscape. However, the route of the A515 runs close to the farm to the east while a number of large modern buildings associated with a nearby garden centre have blocked the farm's view across the rural landscape to the south, although this rural landscape is appreciable on all three other sides.

The contribution setting makes to the significance of the asset

4.3.24 The significance of the asset is primarily derived from its historic fabric and the relationship between the buildings within the farm complex. The asset lies within a primarily rural landscape, although the asset derives little significance from this wider landscape, which has in part been impacted upon by the construction of the garden centre to the south.

Woodgate, Kings Bromley (FRC165), non-designated

4.3.25 A 19th century farmhouse and contemporary outbuildings arranged around a yard to the south-west of the farmhouse; the majority of the farm buildings were on the 1884 Ordnance Survey map. The farm is one of a number of isolated farmsteads located within a rural landscape laid down in the 19th century.

4.3.26 The immediate setting of the asset lies within the farm complex with its wider setting comprising the surrounding rural landscape.

The contribution setting makes to the significance of the asset

4.3.27 The setting of the asset comprises the boundaries of the Lichfield Golf and Country Club with a modern clubhouse to the south and car parking to the east, although the route of the Bilson Brook watercourse is still visible close to the mill.

Seedy Mill, Seedy Mill Farmhouse and Cart Shed, Hanch (FRC149), each Grade II listed

4.3.28 A group of assets centred on an early 19th century red brick corn mill and office with the other assets comprising a farmhouse and cart shed.

4.3.29 The value of the asset is in the surviving fabric of the buildings and in their relationship as a group of contemporary and linked buildings. The historic setting of the asset has been altered through the construction of the Seedy Mill Golf Club golf course, although the asset does derive some value from its spatial association with Bilson Brook.

The contribution setting makes to the significance of the asset

4.3.30 The asset takes its value from the historic fabric of the remaining farm buildings and from their spatial and historic relationship to each other. Some of its significance is derived from the rural landscape, particularly to the west towards which the entrance to the farm faces.

Seedy Mill Waterworks, Hanch (FRC013), Grade II listed

4.3.31 A tall, single storey pumping station constructed in 1938 in a neo-Georgian architectural style from plum-coloured bricks. The pumping station was constructed adjacent to the pre-existing Hanch Reservoir, close to the route of the West Coast Main Line (WCML) and is now located within a modern water processing facility.

4.3.32 The setting of the asset is localised to the water treatment works within which it lies and the nearby reservoir.

The contribution setting makes to the significance of the asset

4.3.33 The asset's value is derived from its surviving historic fabric and from its immediate setting adjacent to the reservoir within a working waterworks.

Former Farmhouse, east of Hanch Hall Farmhouse, Hanch (FRC015), Grade II listed

4.3.34 An early 18th century single storey red brick former farmhouse with an attic. The farmhouse faces south-west towards the B5014, which follows the route of the former Lichfield to Kings Bromley turnpike road that may be contemporary with the farmhouse.

4.3.35 The primary setting of the asset is the active farmyard complex, which includes historic non-designated buildings in addition to modern farm buildings located to the north. The asset lies in a wider setting as part of the estate associated with Hanch Hall and also takes value from its location adjacent to the former turnpike road, which is still an active travel route. The wider setting of the asset is a broadly rural landscape

with the incursions of the WCML to the north and Hanch Reservoir and waterworks to the east.

The contribution setting makes to the significance of the asset

4.3.36 The value of the asset is derived from its historic fabric, its relationship to the other buildings within the farmyard complex and its relationship to Hanch Hall. Little significance is gained through the asset's wider rural setting.

Hanch Hall, coach house and stables and walls and gate piers, Hanch (FRC014), Hanch Hall Grade II* listed with others Grade II listed

4.3.37 A group of assets centred around Hanch Hall, an early 18th century red brick country house with some 19th century additions and alterations. Within the grounds of the hall are the coach house, stables, walls and gate piers dated to approximately 1700, which in turn have later additions and alterations. The walls, which enclose the northern side of the grounds, date to the mid 19th century. Hanch Hall is aligned north-east to south-west with the main entrance facing north-west. The rear of the hall faces south-east looking across parkland towards the Hanch Reservoir.

4.3.38 The primary setting of the asset is defined by its immediate surroundings. The landscape to the south-west of the asset is parkland and views to the surrounding wider landscape are well screened by intervening mature vegetation. To the north-west of the asset, vegetation is in place between the asset and the wider landscape, although this is less complete than the intervening vegetation surrounding parkland to the south-west. The wider surrounding landscape contributes less to the setting of the assets than their immediate setting, although the hall has remained within a broadly rural landscape since its construction. However, exceptions to this rural character are present close to the asset, including the Seedy Mill waterworks, Hanch Reservoir and, most importantly, the presence of the railway line to the north-west, which has served as a main route for rail traffic since the mid 19th century.

4.3.39 The assets are set within a broadly rural wider landscape with the edge along the B5014, the former Lichfield to Kings Bromley turnpike road (FRC063) and Hanch Reservoir bounded by mature trees. The southern edge of the asset is bounded by a small plantation while sporadic planting to the west and north-west break up long range views in this direction. The route of the WCML runs to the north-west of the asset.

The contribution setting makes to the significance of the asset

4.3.40 Much of the assets' value is derived from their historic fabric and the group value of the surviving elements. However, a significant element of the value of the assets is defined by their immediate setting to the north-west and the south-west, which provides context for the group value of the assets.

Kings Bromley Manor remains, dovecot approximately 20 yards south of Sunday's Well, and garden walls and pavilions (FRC066), each listed Grade II

4.3.41 Kings Bromley Manor House was demolished in 1928; all that remains is a four storey square-plan brick tower, built in approximately 1840. The dovecot lay in the grounds

of Kings Bromley Manor, approximately 65m to the south-west of the tower. It is of 18th century red brick construction and has a tiled roof surmounted by a wooden cupola with ball finial. The garden walls and pavilions are also of 18th century red brick construction, with stone detailing, and are located approximately 90m west of the dovecot. There are two brick pavilions, each with pedimented gables, at the western end of the walled garden. The southernmost pavilion has been incorporated into a late 20th century house and is now obscured. The walled garden and pavilions also lay within the grounds of Kings Bromley Manor. All three structures are listed at Grade II. Historic mapping amended in 1902 indicates that the manor house, dovecot and walled garden formed the core of a designed landscape, which was surrounded by parkland that extended north to the River Trent, south to the A513 and east to Kings Bromley village. The main entrance to the estate would appear to have been from the west, north of Echills Farm, through the park.

4.3.42 While the historic setting of the assets was focussed on the parkland, today virtually all of the park has been lost to gravel extraction during the 20th century, while the surviving part of the grounds has been partitioned and is occupied by a number of late 20th century residences. Each of these three assets now lies within land of different ownership: the tower lies immediately adjacent to a late 20th century residence, while the walled garden would appear to contain two houses and a number of commercial-scale glass houses. A great increase in tree cover during the 20th century has further severed any visual link between these three assets. There is no public access to these assets and they are not visible from any publicly accessible location.

The contribution setting makes to the significance of the asset

4.3.43 The significance of these assets now lies predominantly in their historic fabric; their historic setting has been severely compromised and currently contributes little to their significance.

Kings Bromley village buildings (FRC067), fourteen Grade II listed, six locally listed and one non-designated

4.3.44 A group of assets comprising the historic core of the village of Kings Bromley (excluding the listed buildings within the Manor Park and the Church of All Saints, which are discussed separately). The buildings primarily comprise houses and other residential dwellings dating from the 18th and 19th centuries, although some of the assets can trace their origins to the 15th and 16th centuries.

4.3.45 The individual buildings within this group provide the immediate, and most valuable, setting, although the busy A515 Lichfield Road running through the centre affects this setting through traffic noise and vibration. However, it is worth noting that the A515 Lichfield Road follows the route of the former Rugeley and Alrewas turnpike road, which was a major route from the 19th century. This setting has been defined through the development of the village throughout the post-medieval period when many of the buildings were constructed into the modern period and the erection of the war memorial in 1922. The asset also gains value through its immediate setting in relation to the manor and its park and the Church of All Saints.

The contribution setting makes to the significance of the asset

4.3.46 The value of the asset is derived from the surviving historic fabric of the component buildings and through their association with each other within the village context. Some value is gained from the wider rural setting as context for the placement and development of the village.

Church of All Saints and churchyard cross approximately 5 yards south of Church of All Saints (FRC068), Grade I and Grade II listed respectively

4.3.47 Two assets focussed on the Church of All Saints located on the northern edge of the village of Kings Bromley. The church has its origins in the 11th century with its rubble core nave while the later 14th century chancel and 16th century tower are both constructed of sandstone ashlar. Within the churchyard, to the south of the nave, lies a 14th century cross. The asset is located on the edge of the village of Kings Bromley, to the west of the manor house and its park along the A515 Lichfield Road.

The contribution setting makes to the significance of the asset

4.3.48 The value of the asset is mostly derived from its surviving historic fabric, which visually catalogues the church's expansion and development from its establishment in the medieval period through the expansion of the village of Kings Bromley during the post-medieval period. The presence of the 14th century cross also adds group value within the confines of the churchyard. Beyond the churchyard, the asset derives value from its immediate setting defined by the manor and the village. The asset also gains some value from its wider setting as the church is located on the periphery of the settlement and therefore its relationship with the surrounding rural landscape to the north and east is important. This area has remained rural throughout the lifetime of the church, which was designed to be a prominent and visible feature within this landscape.

Echills Farm, Kings Bromley (FRC166), non-designated

4.3.49 A 19th century farmstead composed of a farmhouse and several contemporary ancillary buildings arranged around a yard located to the south-west of the farmhouse. Historic mapping indicates the majority of the buildings depicted on the 1884 Ordnance Survey map are still extant with the addition of several modern buildings.

4.3.50 The asset is a working farm and its setting is primarily defined by the large farmyard complex of buildings. The asset is located within a broadly rural landscape of enclosed fields laid down in the 19th century, with the exception of the modern reservoir constructed to the north-west of the asset in the 1950s. The asset remains linked to the wider landscape through its historic access tracks, which are still in use.

The contribution setting makes to the significance of the asset

4.3.51 The significance of the asset is primarily derived from the surviving historic fabric of the buildings and their relationship to each other and the farm's historic access. The surrounding rural landscape does add some significance to the asset, particularly from the woodland at each access track and with views across the landscape to the south.

Pipe Ridware Hall; garden walls and gate piers at Pipe Ridware Hall; fragment of garden wall at, Pipe Ridware Hall; and dovecote remains at Pipe Ridware Hall and attached wall to the north (FRC078), each listed Grade II

4.3.52 Pipe Ridware Hall was built around 1800 on an L-shaped plan, and is of rendered brick construction with a slate roof. The current hall is built on the site of an earlier timber framed mansion surrounded by a walled garden, of which the northern, western and part of the southern circuit survive. The walls are of red brick construction with moulded stone coping and date to the 16th or 17th century. A hexagonal-plan dovecot (now derelict) of similar date and construction survives to the south of the current Pipe Ridware Hall, where it was once keyed into the eastern return of the garden wall serving the earlier hall. The main range of ancillary buildings is aligned north-south and faces west across agricultural fields toward Hill Ridware. The rear wing is aligned east-west and faces south across the River Trent and open countryside. The historic farm buildings, which lay around three sides of a yard immediately to the east of the Hall, were replaced by large steel structures in the 20th century.

4.3.53 The asset is set within a working farm with numerous large modern sheds lying to the east of Pipe Ridware Hall, which have compromised views to the east, located on the edge of a small hamlet, only approximately 60m from the banks of the River Trent and served by a single-track road. The surrounding landscape is one of arable fields amalgamated in the 20th century and well preserved drains of a water meadow located on the northern bank of the River Trent providing landscape continuity back to the 17th century. Ridware meant 'dwellers by the ford'; thus its liminal location (which persists today) is of fundamental importance to an understanding of settlement at this location. The main views from the hall itself are focussed to the west across the walled garden of the former hall providing further historic continuity.

The contribution setting makes to the significance of the asset

4.3.54 The significance of the asset is primarily derived from the remaining elements of structural continuity at the hall and from its spatial and historic relationship with the hamlet of Pipe Ridware. The asset also derives significance from its relationship to nearby landscape elements including the River Trent, former water meadows and the surrounding agricultural land. This immediate setting, which also includes the walled garden of the former hall, makes a significant contribution to the significance of these assets.

Wheelwright Cottage and attached workshop (FRC079), listed Grade II

4.3.55 The cottage is timber framed with plaster infill panels. It has three structural bays, is of baffle-entry plan and is one storey high with an attic. It is aligned east-west and faces south. It is of 17th century date. The cottage is joined, by means of a 20th century extension, to an 18th century red brick workshop, which retains a forge. The workshop is aligned north-south, along the short road to Pipe Ridware Hall.

4.3.56 The immediate setting of the asset is the internal courtyard and the garden to the south. The wider setting of the asset is linked to the historical, spatial and functional relationship with at least two iterations of Pipe Ridware Hall including the current working farm and its large agricultural buildings, and the hamlet of Pipe Ridware.

The contribution setting makes to the significance of the asset

4.3.57 The significance of the asset is primarily derived from its historic fabric and its immediate courtyard setting. The asset derives some significance from its wider setting through its relationship with Pipe Ridware Hall and the surrounding rural landscape.

Parva House (FRC081), Pipe Ridware

4.3.58 Parva House is a farmstead that existed by the late 19th century, located in the hamlet of Pipe Ridware. It has a regular U-shaped courtyard plan and a detached farmhouse with the former farm buildings now converted for domestic use.

4.3.59 The setting of the asset is focussed on its internal courtyard around which the component buildings are arranged and beyond to the hamlet of Pipe Ridware. The wider setting of the asset is defined by the surrounding rural landscape.

The contribution setting makes to the significance of the asset

4.3.60 The significance of the asset lies in what remains of its historic fabric, its historic form, which is appreciable best in plan, and its spatial and historic relationship with the hamlet of Pipe Ridware. The surrounding fieldscape provides the wider setting for the asset but does not contribute significantly to the significance of the asset.

Church of St James, Pipe Ridware (part of FRC080), non-designated

4.3.61 The nave and bellcote of the church were built in approximately 1840, while the chancel was built in 1899. The church is thought to occupy the site of a medieval predecessor, not least because it formerly contained a font of Norman date, which was removed when the church was converted into a theatre.

4.3.62 The setting of the church comprises, principally, the rectangular churchyard within which it is located. The wider setting of the asset is defined by the hamlet of Pipe Ridware and the surrounding rural landscape.

The contribution setting makes to the significance of the asset

4.3.63 The significance of the asset is primarily derived from its spatial and historic association with the site of a probable earlier church. Some significance is also derived from the historic fabric of the church, from its immediate churchyard setting and from its wider landscape setting as an element of the hamlet of Pipe Ridware.

Cross, Pipe Ridware (part of FRC080), non-designated

4.3.64 The remains of a medieval or later churchyard cross are present within the grounds of the Church of St James, Pipe Ridware.

4.3.65 The setting of the asset is confined to the churchyard.

The contribution setting makes to the significance of the asset

4.3.66 Much of the value of this asset resides in its historic fabric with some significance derived from its churchyard setting.

Hunger Hill Farmhouse (FRC111), listed Grade II

4.3.67 This farmhouse is of timber framed construction with plastered infill panels, baffle-entry plan and two bay construction. It is aligned east-west and faces south. It is of 17th century date. Its farm buildings describe a dispersed cluster plan, which may have been extant since the 17th century.

4.3.68 The asset is situated in an isolated hilltop location, within a tree-fringed triangular enclosure accessible via a single track road that terminates at the asset surrounded by large, enclosed fields. The main elevation of the farmhouse looks south across the Trent Valley landscape, although this is partially screened by existing vegetation along the edge of the garden.

The contribution setting makes to the significance of the asset

4.3.69 The significance of the asset is derived from its historic fabric, its relationship with the other buildings within the farm complex, from the continuity of use of its historic access track and from the rural landscape of the Trent Valley to the south towards which the asset faces.

Woodhouse Farmhouse (FRC089), listed Grade II

4.3.70 This is a mid 18th century red brick farmhouse incorporating elements of a 17th century timber framed predecessor. The house is aligned north-west to south-east, along a single-track road, which is its historic access. Red brick farm buildings of 19th century date are arranged around three sides of a farmyard located adjacent to the north-west, although large 20th century steel structures are massed beside and behind these.

4.3.71 The asset's setting is primarily defined by the large working farm complex to the north and north-west, its gardens to the east and south-east and by Pipe Wood Lane, which runs in front of the main elevation of the asset, and the rural landscape beyond towards Quintons Orchard, Hill Ridware and Rugeley Power Station approximately 3.5km away.

The contribution setting makes to the significance of the asset

4.3.72 The significance of the asset lies in its historic fabric, its spatial and historic relationship to the other buildings within the farm complex and its historic access along Pipe Wood Lane. The asset also gains significance from the surrounding rural landscape, in particular from the south-west facing elevation towards Quintin's Orchard.

Bentley Hall Farmhouse (FRC092), listed Grade II

4.3.73 Bentley Hall Farmhouse is of three storey brick construction, and comprises two conjoined ranges, each oriented east to west. The front range is of 18th century date, while the rear extension was built in the 19th century. The farmhouse is accessed via a long track that exits the B5014 approximately 660m to the west, and looks south over enclosed fields. The farmyard lies on the eastern side of the house, and formerly contained a number of dispersed farm buildings, only one of which survives today. The other historic buildings were replaced with large steel structures in the 20th century.

4.3.74 The immediate setting of the asset is defined by the farm complex and its access track. The asset's relationship with the Grade II listed Bentley Hall Cottage also forms part of its setting as does its historic access track, which both assets share. The wider setting of the asset is characterised by the surrounding rural landscape, although some noise from the Trent Valley railway line is discernible.

The contribution setting makes to the significance of the asset

4.3.75 The significance of the asset lies in its historic fabric and its immediate setting defined by its relationship with the farm complex, its relationship with its historic access and its relationship with Bentley Hall Cottage. The asset's wider rural setting contributes some significance to the asset.

Bentley Hall Cottage (FRC093), listed Grade II

4.3.76 Bentley Hall Cottage dates to around 1700, is aligned east-west and faces south. It has two storeys over a cellar, a two cell lobby entrance plan, and is of some architectural pretention. It is built of sandstone ashlar and has mullioned sandstone windows and ovolo-moulded fireplaces and ceiling beams. It has a brick extension to the rear. An earlier, 17th century barn stands adjacent, though is not listed. It forms part of a dispersed cluster of farm buildings, on the eastern side of the cottage. The cottage is accessed via a track that leaves the B5014 approximately 200m to the west. The track then carries on to Bentley Hall Farmhouse, where it terminates.

4.3.77 The setting of the asset is defined by its farm complex including a contemporary barn in addition to modern agricultural buildings and its historic access. The asset's relationship with the Grade II listed Bentley Hall Farmhouse also forms part of its setting. The asset's wider setting is characterised by the surrounding rural landscape, although some noise from the Trent Valley railway line is discernible.

The contribution setting makes to the significance of the asset

4.3.78 The significance of the asset lies in its historic fabric and its immediate setting defined by its relationship with its contemporary barn and the other buildings within the dispersed farm complex, its relationship with its historic access and its relationship with Bentley Hall Farmhouse. The asset's wider rural setting contributes some significance to the asset.

Colton Hall Farm, Colton (FRC173), non-designated

4.3.79 A 19th century farmstead depicted on historic mapping, which indicates many of the original buildings are extant, all of which appear to have been converted into residential dwellings. The asset is accessed from Blithbury Road along a short, tree lined track way, which is visible on historic mapping. Historic mapping also indicates the current extent of the farm's grounds has remained relatively similar in size.

4.3.80 The setting of the asset is defined by the farmyard, its grounds (which lie to the west and south of the asset) and its historic access. The grounds are surrounded on the northern, western and southern sides by mature vegetation with views out to the surrounding landscape limited to the east and a small section to the north-west.

The contribution setting makes to the significance of the asset

4.3.81 The significance of the asset lies in its historic fabric and its spatial and historic relationship between the buildings that comprise the farm. The asset also derives significance from its immediate setting within its historic grounds; the surrounding rural landscape is almost entirely screened by mature vegetation on all but the western edge. This wider landscape adds little in the way of significance to the asset.

Chimney stack approximately 10 yards west of Littlehay Manor Farmhouse (FRC122), listed Grade II

4.3.82 This is a brick chimney stack that served the 16th century manor house of Little Hay Manor, one of three medieval and post-medieval manors in Colton. It is of brick construction, with sandstone detail. It served two fireplaces, one at ground and one at first floor level. The first floor opening has a Tudor arch; the chimney has two star-shaped shafts.

4.3.83 The setting of the asset is defined by the immediate area of the replacement manor house and its farm buildings.

The contribution setting makes to the significance of the asset

4.3.84 The farmstead that now occupies the site of Little Hay Manor house is of 19th century origin. It is not clear that any of the detail of the grounds associated with the Tudor manor house survives today. Consequently, the value of the asset resides solely in its historic form and fabric; its setting contributes nothing to its value.

Hamley House, and gate piers and attached garden wall immediately south-west of Hamley Hall (FRC127), each listed Grade II

4.3.85 Hamley House is a farmhouse with a T-shaped plan. The main range is aligned north-east to south-west, and faces north-west; the rear wing is aligned north-west to south-east. It is of red brick construction and is of 17th century date with the other buildings in the farmyard complex modern in date. Enclosing a garden to the south-west of Hamley House is red brick wall with stone coping, with two square section gate posts capped with ball finials, which itself is surrounded by mature vegetation.

4.3.86 The setting of the asset is primarily defined by the farmyard complex and the garden to the south. The asset's wider setting is defined by the rural landscape and its spatial proximity to Moreton Brook.

The contribution setting makes to the significance of the asset

4.3.87 The significance of the asset is derived from its historic fabric and its immediate setting focussed on its farmyard and garden. Some significance is derived from its wider rural setting.

Hamley Cottage Farm, Colton (FRC135), non-designated

4.3.88 An early 19th century three storey, red brick farmhouse, the former outbuildings of which have been converted for residential use and is bounded by the B5013 Uttoxeter Road.

4.3.89 The immediate setting of the asset is defined by the complex of buildings, the grounds beyond and the B5103 Uttoxeter Road, which introduces traffic noise into the otherwise rural setting.

The contribution setting makes to the significance of the asset

4.3.90 The significance of the asset lies primarily in its historic fabric and the immediate setting characterised by the asset's constituent buildings. The asset's wider setting adds some significance to the asset.

Jongham's Cottage, Colton (FRC136)

4.3.91 An 18th or 19th century farmworker's cottage visible on historic maps since 1832 – 1833, which lies at the end of a quiet track. The cottage lies adjacent to a rectangular enclosure with three rectangular fishponds to the south-east.

The contribution setting makes to the significance of the asset

4.3.92 The value of the asset lies in the surviving fabric of the cottage, its relationship to the enclosure and fishponds and the wider quiet rural setting.

Lea Hall Farmhouse (FRC137), listed Grade II

4.3.93 Lea Hall Farmhouse is of early 19th century date, has an L-shaped plan and is of red brick construction. The main house is aligned east-west, facing south; the rear wing to the east is aligned north-south. Its historic farm buildings survive, arranged around three sides of a yard to the south of the farmhouse, but the farmyard itself is now filled with steel structures of 20th century date, and similar structures are present to the north and east.

4.3.94 The setting of the asset is defined by the farmyard and the buildings within it along with the route of the B5013 Uttoxeter Road. The front elevation of the asset looks out across the rural landscape of the Trent Valley, which forms a significant element of the asset's setting, although intervening vegetation partially screens these views.

The contribution setting makes to the significance of the asset

4.3.95 The significance of the asset lies in its historic fabric and its spatial and historic link to Lea Farm Cottage. The setting of the asset adds to its significance as it looks out across the Trent Valley with the front elevation of the asset facing in its direction to make use of the rural views.

Lea Hall Farm Cottage (FRC138), listed Grade II

4.3.96 This is an early 18th century red brick house with 19th century additions and alterations (including a third storey). It is aligned east to west and faces south. It lies approximately 60m to the north-west of Lea Hall Farm and is accessed through the farmyard.

4.3.97 The setting of the asset is defined by its relationship with Lea Hall Farmhouse and the range of agricultural buildings that make up the farm. The front elevation of the asset faces south across the rural landscape of the Trent Valley, although the asset's front garden is surrounded by trees and vegetation that intervene in direct views towards the valley.

The contribution setting makes to the significance of the asset

4.3.98 The significance of the asset is mainly derived from its historic fabric and its immediate setting in relation to Lea Hall Farmhouse and the agricultural buildings, which form its farmyard complex. The Trent Valley forms a significant element of the asset's setting as its main elevation was constructed to face across it. However, the presence of intervening vegetation curtails views across the wider landscape.

Sedge Cottage and The Smithy, and Blythe Moor (FRC139), School Lane, Blithfield, each listed Grade II

4.3.99 Sedge Cottage and The Smithy are conjoined 19th century cottages of red brick construction. They both have tiled roofs and timber lean-to porches. Blythe Moor is a timber framed house with brick-infilling and tiled roof, and is of probable 17th century origin, but was extended and largely rebuilt in approximately 1900. These three buildings are ranged along the eastern side of the southern end of School Lane onto which they face. They formed one focus of the polyfocal estate village serving Blithfield Hall.

4.3.100 The setting of the asset is derived from the tree-lined School Lane and by their spatial and historic relationship with Blithfield Hall and its estate. The boundaries of the estate were specifically designed to screen the hall and the park from the outside.

The contribution setting makes to the significance of the asset

4.3.101 The significance of the assets lies in their historic fabric and in their immediate setting as defined by School Lane, while the continuity of the asset's historic setting and relationship with contemporary assets also adds significant value.

Blithfield House (FRC140), School Lane, Blithfield

4.3.102 Former school and schoolmaster's house (now in use as the village hall), of mid 19th century date. The buildings were designed by architect G.E. Street and are of red brick construction, with ashlar dressings and slate and fishscale-tile roofs with crested ridge tiles. Blithfield House is located at the northern end of School Lane, adjacent to a second focus of the estate village serving Blithfield Hall. Blithfield House and the adjacent cottages appear not to have changed since their depiction on historic mapping amended in 1904. The northern end of School Lane remains free from road markings and discordant street furniture.

4.3.103 The setting of the asset is derived from the tree-lined School Lane and by their spatial and historic relationship with Blithfield Hall and its estate. The boundaries of the estate were specifically designed to screen the hall and the park from the outside.

The contribution setting makes to the significance of the asset

4.3.104 The significance of the assets lies in their historic fabric and in their immediate setting as defined by School Lane, while the continuity of the asset's historic setting and relationship with contemporary assets also adds significant value.

Friary Lodge and Bagot Lodge, Blithfield Hall Park (FRC141), each listed Grade II

4.3.105 A pair of listed early 19th century lodges and their associated gate piers and railings, which flank the main drive to Blithfield Hall. The Gothic style lodges are of ashlar construction, each with a slate roof.

4.3.106 The setting of the assets is defined by the driveway to Blithfield Hall, its junction with the B5013 Uttoxeter Road, the landscape park through which the drive runs and the village of Admaston. The assets are surrounded by mature vegetation.

The contribution setting makes to the significance of the asset

4.3.107 The assets are functionally and visually related to the main drive to the Hall and to the park beyond their confines. These remain today as depicted upon historic mapping amended in 1904, and are fundamental to the significance of these assets. Key views are north-north-west toward Blithfield Hall with external views screened by intervening vegetation.

4.4 Key built heritage assets within 2km of the land required for the Proposed Scheme, where this also falls within the ZTV

4.4.1 The criterion for inclusion within this section is that the Proposed Scheme is assessed in Volume 5: Appendix CH-003-001 Cultural heritage impact assessment table as having a major or moderate adverse effect upon a designated asset that lies within 500m and 2km of the land required for the Proposed Scheme and also lies within the ZTV of the Proposed Scheme. Descriptions of all designated assets within this area can be found in Volume 5: Appendix CH-002-001.

4.4.2 There are no designated heritage assets within the above-defined area upon which the Proposed Scheme will have a major or moderate adverse significant effect.

5 Historic landscape

5.1 Introduction

5.1.1 A process of historic landscape assessment has been carried out, identifying Historic Landscape Character Areas (HLCA) along the route of the Proposed Scheme. HLCA are based on historic landscape characterisation undertaken by Staffordshire County Council and Cheshire County Council and through consultation with these authorities and Historic England. HLCA have been defined where the historic landscape has a broadly distinct area of homogeneity. Descriptions of individual HLCA are presented in Volume 5: Appendix CH-005-000 Historic landscape character report.

5.1.2 HLCA identified within the Fradley to Colton area comprise:

- HLCA1: Fradley to Bromley Heath;
- HLCA2: Kings Bromley, the Trent Valley and the Ridwares;
- HLCA3: The Trent Valley, Rugeley; and
- HLCA4: Colton and Hamstall Ridware.

5.2 Parks and Gardens

5.2.1 A number of country houses and their pleasure gardens and landscape parks were established throughout Staffordshire during this period, perhaps aided by the early enclosure of the Staffordshire landscape.

Blithfield Hall

5.2.2 Blithfield Hall, of late medieval origin, was substantially rebuilt in the 17th and augmented in the 18th and 19th centuries. The Hall and its associated buildings (FRC142) lie outside the study area, but the southernmost parts of its associated post-medieval landscape park (FRC143) and the 19th century Bagot and Friary Lodges (FRC141) at the entrance to the park, lie within the study area.

Kings Bromley Manor

5.2.3 The former Kings Bromley Manor and its former landscape park also lay within the study area. The manor house was rebuilt in 1755 for Samuel Newton; a dovecot and walled garden were built adjacent during the 18th century. A landscape park was established to the south of the manor house during the post-medieval period, and this was extended and re-laid in the early 19th century. The manor house was demolished in 1928, with the exception of a red brick tower built in the 1840s; the 18th century dovecot and garden walls also survive (FRC066), but all three are almost engulfed by vegetation and lie isolated in the grounds of three separate 20th century properties. After the manor was demolished, 85 per cent of its landscape park (FRC064) was lost to gravel extraction and a golf course.

Pipe Ridware Hall

5.2.4 At Pipe Ridware Hall (FRC078), the remains of a walled garden with an integral hexagonal dovecot and gate piers, once adorned an earlier, 17th century build of Pipe

Ridware Hall. The 17th century timber framed hall and walled garden are both illustrated in Stebbing Shaw[74].

[74] Shaw (1798), p. 161

6 Archaeological risk mapping

6.1 Introduction

6.1.1 The archaeological character of the route has been broken down into a series of Archaeological Character Areas (ACA) and Archaeological Sub-Zones (ASZ). These are described below and depicted in Cultural Heritage Map Series CH-01-201 – CH-01-205a-R1.

6.2 Archaeological character areas

ACA1: Trent Valley; Fradley to Pipe Ridware

6.2.1 This archaeological character area encompasses the Trent Valley, where crossed by the route of the Proposed Scheme between Kings Bromley and Handsacre, including the river terrace deposits laid down by the River Trent during the Pleistocene epoch. The river terrace deposits extend from Fradley, to the south-east of the River Trent, to the rising ground to the north-west of Pipe Ridware. The river terrace deposits within this ACA are crossed by several minor watercourses including, from south-east to north-west: Pyford Brook, Ashby Sitch, Bourne Brook, the unnamed brook to the east of Handsacre and, on the north-western bank of the River Trent, Bentley Brook. Many of these watercourses are flanked by alluvium of Pleistocene or Holocene date, as is the River Trent itself.

6.2.2 The river terrace deposits associated with the River Trent comprise sands and gravels that give rise to deep sand to sandy loam soils. Such soils are light and well drained and were readily cultivable using the primitive ard or scratch plough available to cultivators prior to the introduction of the heavy, mouldboard plough during late Saxon period.

6.2.3 It is likely to be a combination of the light, well-drained soils and the ready supply of water that made this ACA attractive to prehistoric settlers, for there is a dense palimpsest of prehistoric cropmarks throughout and beyond it. This cropmark landscape includes attested Neolithic causewayed enclosures at Fradley and Mavesyn Ridware, which lie within approximately 0.9 - 0.6km of this ACA respectively; and a possible third causewayed enclosure to the east of Handsacre, which lies within the ACA. There is a possible Neolithic cursus monument at Hill Ridware and a possible Neolithic mortuary enclosure to the west of Pipe Ridware, both of which lie within this area. These Neolithic monuments suggest there may have been one or more contemporary communities resident within this ACA. Bronze Age barrow cemeteries focussed upon Bourne Brook, the unnamed brook to the east of Handsacre, to the east of Kings Bromley and to the east of Pipe Ridware lie wholly or partially within this ACA. It also contains several kilometres of pit alignments that are likely to have their origins in the Iron Age but which may have continued in use into the Romano-British period. Those pit alignments would appear to define 'ranch boundaries', fields and enclosures. Many other field and enclosure boundaries visible in the cropmark record comprised continuous ditches and these, too, are likely to have been extant in the Iron Age and Romano-British period. The cropmark remains of a probable Iron Age square barrow are visible within this ACA to the north-west of Pipe Ridware, while the Ridware place name is suggestive of settlement at Pipe Ridware during the Mercian

period. Archaeological and palaeoenvironmental remains of prehistoric to medieval date may lie preserved beneath or within alluvial deposits flanking the various watercourses located within this area.

6.2.4 Due to the free draining nature of the soils that formed upon the river terrace deposits within this ACA, they were vulnerable to nutrient depletion. Much of the land to the south-east of the River Trent would appear to have reverted to woodland or scrub during the early medieval period, and there is documentary and place name (Echills) evidence that it was re-cleared of vegetation for agricultural exploitation during the medieval period prior to the later 14th century[75]. Many of the settlements that exist within and around the ACA today are named in Domesday and so existed in some form by 1086; all other extant settlements were founded during the medieval period.

6.2.5 Some land at Fradley, Alrewas and Kings Bromley that cropmark evidence indicates had been intensely exploited during the prehistoric period was relatively unproductive heathland prior to its planned enclosure in the later 18th and 19th centuries. There is cropmark, earthwork and map evidence that some of the floodplain land immediately adjacent to and on each side of the River Trent, where crossed by the route of the Proposed Scheme, was exploited as water meadows during the post-medieval period. The Trent and Mersey Canal was constructed through this ACA during the late 18th century.

ACA2: Blithbury to Colwich

6.2.6 This ACA is focussed principally upon the south-east to north-west aligned interfluve uplands between the Rivers Trent and Blithe, but also contains low lying land in the Trent Valley at Rugeley. The bedrock geology of the interfluve is Mercia Mudstone. This gives rise to slightly acidic soils that are wetter and heavier than those formed above the river terrace deposits that characterise ACA1 and the low lying land within the Trent Valley at Rugeley.

6.2.7 In addition to the River Trent, this ACA is crossed by several minor watercourses, including Bentley Brook and Moreton Brook. All three of these watercourses are partially flanked by alluvium.

6.2.8 The earthwork and cropmark remains of two probable Bronze Age round barrows and an adjacent cropmark enclosure of probable prehistoric date are present on a thin band of river terrace deposits opposite Rugeley Power Station and are suggestive of significant prehistoric archaeological potential at that location. Conversely, the archaeological potential of the more extensive river terrace deposits on the south-western side of the River Trent within this ACA is likely to have been removed during the construction of Rugeley Power Station and of residential properties within Rugeley.

6.2.9 There are many fewer cropmark remains of prehistoric activity on the Mercia Mudstones of the interfluve uplands than on the river terrace deposits of the River Trent. This is likely to be the result, at least in part, of the heavier and wetter soils that formed upon Mercia Mudstones, which would have been difficult to plough using the ard or scratch plough available to cultivators prior to the late Saxon period. The

[75] Dyer (2000), p.243

slightly acidic nature of the soils that form on Mercia Mudstone would also make them, at least initially, less fertile than the soils present upon the river terrace deposits of the Trent Valley. However, this ACA is not entirely devoid of prehistoric archaeological remains. A fieldwalking exercise to the north of Rake End recovered a thin scatter of prehistoric struck flints; a Bronze Age round barrow survives as a cropmark to the south of Bentley Hall Cottage; the remains of four Bronze Age burnt mounds survive along the course of Moreton Brook within this area; and there are cropmark remains of a prehistoric or Romano-British enclosure adjacent to Tolldish Lane. There may also be potential for prehistoric to medieval archaeological remains to survive below or within the alluvial deposits that flank parts of the water courses within the ACA.

6.2.10 There are extensive remains of medieval and later activity on the Mercia Mudstone interfluve, which is likely to reflect changes in how cultivable these soils were over time. Although the soils formed on the river terrace deposits were initially more fertile than the slightly acidic soils formed upon the Mercia Mudstone, the former were freely draining and therefore prone to leaching and nutrient depletion. The more poorly draining soils that formed on Mercia Mudstone were not as vulnerable to leaching and, although heavier, could be cultivated effectively after introduction of the heavy, mouldboard plough in the late Saxon period. The slightly acidic soils that formed above Mercia Mudstone are also known to have been 'sweetened' by the application of marl during the post-medieval period, and this process may have had its origins in the medieval period. Consequently, the settlements at Blithbury, Colton and Moreton, along with their arable open fields, were all founded on the Mercia Mudstone geology during the medieval period. There were two manorial deer parks wholly or partially within this ACA at Colton, where there was also a medieval glass-making furnace. The medieval settlement of Moreton, which was recorded in Domesday, was deserted in the late medieval or post-medieval period, and its site may lie partially or wholly within this ACA.

6.2.11 Several country houses were built, and their associated designed landscapes laid out, along the route of the Proposed Scheme during the post-medieval period. These include Moreton House, which was a minor country house built *de novo* in the late 18th century by a Black Country industrialist. It was equipped with a designed garden demarcated by a ha-ha, which lies substantially within both this ACA and within the land required for the Proposed Scheme. Water meadows were laid out on the River Trent flood plain at Rugeley during the post-medieval period and survive intermittently in attenuated form today.

6.3 Archaeological sub-zones

ASZ1: South-east Fradley

6.3.1 This risk zone is located on superficial deposits of sand and gravel, which are likely to be Pleistocene river terrace deposits associated with the River Trent. River terrace deposits may preserve floral and faunal remains of Palaeolithic date that are instrumental in providing information on past climates and environments and developing secure chronostratigraphic frameworks through both relative and absolute dating. They may also contain Palaeolithic activity sites or artefacts in primary or, more likely, secondary contexts. Gravel terraces may also have been favourable locations for Mesolithic activity, since regional studies have indicated that well-

drained soils above a watercourse may have been preferred. It falls within the study area of the Staffordshire Eastern Rivers Confluence National Mapping Project (NMP). The NMP recorded a wealth of prehistoric and perhaps Romano-British features on river terrace deposits associated with the River Trent to the north-west of ASZ1, but none in this risk zone. It is not known whether that is because of an absence of activity, because of geological variation, or because of differential agricultural exploitation thereafter. In addition, several prehistoric periods are characterised by settlements and burial practices that are typically unconducive to cropmark formation. Consequently, this risk zone should be considered to have a high potential for containing hitherto unidentified archaeological remains of prehistoric to early medieval date. That potential could be assessed by means of geophysical survey, fieldwalking survey and trial trenching.

ASZ2: Pyford Brook

6.3.2 This risk zone contains a narrow band of Holocene alluvium on each flank of Pyford Brook. The alluvium has the potential to contain stratified waterlogged archaeology and may contain interbedded organic (peat) horizons of high geoarchaeological and palaeoenvironmental potential. It may also contain or seal archaeological remains of prehistoric to medieval date. Its potential to seal Middle or Late Bronze Age burnt mounds and associated settlement may be particularly high, as four Bronze Age burnt mounds (FRC133) have been identified in a similar context within the valley of Moreton Brook, Colton, at the north-western end of the study area, while 21 similarly located burnt mounds have been recorded in Staffordshire to date. The potential for stratified waterlogged archaeology and geoarchaeological potential could be assessed by means of geoarchaeological/palaeoenvironmental coring and trial trenching. The prehistoric to early medieval potential could be assessed by means of stream-walking, fieldwalking, geophysical survey and trial trenching.

ASZ3: Fradley

6.3.3 This risk zone is located on superficial deposits of sand and gravel, which are likely to be Pleistocene river terrace deposits associated with the River Trent. River terrace deposits may preserve floral and faunal remains of Palaeolithic date that are instrumental in providing information on past climates and environments and developing secure chronostratigraphic frameworks through both relative and absolute dating. They may also contain Palaeolithic activity sites or artefacts in primary or, more likely, secondary contexts. Gravel terraces may also have been favourable locations for Mesolithic activity, since regional studies have indicated that well-drained soils above a watercourse may have been preferred. This risk zone falls within the study area of the Staffordshire Eastern Rivers Confluence NMP. The NMP recorded a wealth of prehistoric and perhaps Romano-British features on river terrace deposits associated with the River Trent to the north-west of ASZ3, but very few in this risk zone. It is not known whether that is because of a relative absence of activity, because of geological variation, or because of differential agricultural exploitation thereafter. In addition, several prehistoric periods are characterised by settlements and burial practices that are typically unconducive to cropmark formation. Consequently, this risk zone should be considered to have a high potential for containing hitherto unidentified archaeological remains of prehistoric to early

medieval date. That potential could be assessed by means of geophysical survey, fieldwalking survey and trial trenching.

ASZ4: Rileyhill

6.3.4 This risk zone is located on Devensian river terrace deposits laid down by the River Trent, and also contains a narrow band of Holocene alluvium that flanks Bourne Brook. The river terrace deposits may preserve floral and faunal remains of Palaeolithic date that are instrumental in providing information on past climates and environments and developing secure chronostratigraphic frameworks through both relative and absolute dating. They may also contain Palaeolithic activity sites or artefacts in primary or, more likely, secondary contexts. This risk zone falls within the study area of the Staffordshire Eastern Rivers Confluence NMP. The NMP recorded a wealth of ring ditches of probable Early Bronze Age date within this risk zone, as well as pit alignments of probable Middle Iron Age date and enclosures of probable Middle and Late Iron Age or Romano-British date. Gravel terraces may also have been favourable locations for Mesolithic activity, since regional studies have indicated that well-drained soils above a watercourse may have been preferred. In addition, there may be potential for this risk zone to contain buried archaeological remains of Neolithic, Middle and Late Bronze Age date, Early Iron Age, Roman and early medieval date, as the light soils were amenable to cultivation by the light plough technology then available. There are a number of Neolithic ceremonial or ritual monuments within and adjacent to the study area and it is possible that the communities that used those monuments will have been resident within the study area; Neolithic settlement sites are rarely visible in the cropmark record. Similarly, the open settlements and flat cemeteries that typically prevailed from the Middle Bronze Age to the Early Iron Age are also typically unconducive to cropmark formation. The Holocene alluvium flanking Bourne Brook has the potential to contain stratified waterlogged archaeology and may contain interbedded organic (peat) horizons of high geoarchaeological and palaeoenvironmental potential. It may also contain or seal archaeological remains of prehistoric to medieval date. It's potential to seal Middle or Late Bronze Age burnt mounds and associated settlement may be particularly high. The archaeological potential of this risk zone could be assessed by means of geophysical survey, fieldwalking survey, trial trenching and, in respect of the Holocene alluvium at Bourne Brook, by means of geoarchaeological/palaeoenvironmental coring.

ASZ5: Kings Bromley Gravels

6.3.5 This risk zone is located on Devensian river terrace deposits laid down by the River Trent. River terrace deposits may preserve floral and faunal remains of Palaeolithic date that are instrumental in providing information on past climates and environments and developing secure chronostratigraphic frameworks through both relative and absolute dating. They may also contain Palaeolithic activity sites or artefacts in primary or, more likely, secondary contexts. This risk zone falls within the study area of the Staffordshire Eastern Rivers Confluence NMP. The NMP recorded a probable round barrow cemetery comprising nine ring ditches (FRC158). Three of the ring ditches are larger than 30m in diameter and two of those have diameters larger than 45m. All or some of these three ring ditches could be exceptionally large barrows of Middle Neolithic date; alternatively, they may all be of Early Bronze Age date. The

NMP also identified a field system and track defined by pit alignments, which are likely to date from the Middle Iron Age (FRC158). A scattering of Romano-British finds recovered from above this field system suggest it may have had an extended currency, while clusters of pits at the same location are probably indicative of medieval gravel extraction. There may be potential for the presence of Mesolithic artefacts and activity sites, as well as Neolithic and Early Bronze Age settlement adjacent to the barrows. There may also be potential for archaeological remains associated with Middle Bronze Age to Early Iron Age and Romano-British to early medieval burial and settlement, all of which typically favoured the lighter well drained soils that form upon river terrace deposits but which are typically not conducive to cropmark formation. The palaeoenvironmental potential of this risk zone could be established by means of geoarchaeological/palaeoenvironmental coring, while its archaeological potential could be assessed by means of geophysical and fieldwalking survey, and trial trenching.

ASZ6: Echills

6.3.6 This risk zone is located on Devensian river terrace deposits laid down by the River Trent. These deposits have the potential to preserve floral and faunal remains of Palaeolithic date that are instrumental in providing information on past climates and environments and developing secure chronostratigraphic frameworks through both relative and absolute dating. They may also contain Palaeolithic activity sites or artefacts in primary or, more likely, secondary contexts. This risk zone also falls within the study area of the Staffordshire Eastern Rivers Confluence NMP. The NMP recorded a number of ring ditches that are probably the ploughed-down remains of Early Bronze Age round barrows, a number of pit alignments of probable Middle Iron Age date, and several ditched enclosures of probable Iron Age or Romano-British date. There may be potential for the presence of Neolithic settlement with the risk zone, associated with the ceremonial monuments of this period that lie within and adjacent to the study area. There may also be settlement associated with the Early Bronze Age round barrows, since it has been hypothesised that, in a West Midlands context, contemporary settlements may have been located adjacent to barrow cemeteries. It has also been theorised that Mesolithic communities selected for well-drained sites adjacent to waterbodies, while prehistoric to early medieval cultivators prioritized light, well drained soils, such as those that develop upon sand and gravel river terraces. The NMP also recorded a palimpsest of field boundaries within this risk zone, which are likely to date from the prehistoric to post-medieval periods. The place name Echills has its origins in Middle English, and means 'land added to an estate'. This may suggest there is potential for encountering remains related to medieval assarting (the conversion of waste to agricultural land) and perhaps dispersed settlement, which may have been deserted in the late medieval period. Once again, the palaeoenvironmental potential of this risk zone could be established by means of geoarchaeological/palaeoenvironmental coring, while its archaeological potential could be assessed by means of geophysical survey, fieldwalking survey and trial trenching.

ASZ7: Bourne Brook

6.3.7 This risk zone is located on Devensian river terrace deposits laid down by the River Trent, and also contains a narrow band of Holocene alluvium that flanks Bourne

Brook, to the south-west of Rileyhill. The river terrace deposits may preserve floral and faunal remains of Palaeolithic date that are instrumental in providing information on past climates and environments and developing secure chronostratigraphic frameworks through both relative and absolute dating. They may also contain Palaeolithic activity sites or artefacts in primary or, more likely, secondary contexts. This risk zone falls within the study area of the Staffordshire Eastern Rivers Confluence NMP. The NMP revealed the ploughed down remains of a number of Bronze Age round barrows, Middle Iron Age pit alignments and continuous land divisions of likely Iron Age or Roman date. As with the river terrace deposits described above, those within this risk zone may have the potential to contain settlement, burial and agricultural remains of all archaeological periods from the Mesolithic to the early medieval period, many of which are typically not represented in the cropmark record. The Holocene alluvium may also have the potential to contain and seal remains of archaeological and palaeoenvironmental potential. This potential could be assessed by means of geoarchaeological/ palaeoenvironmental coring, fieldwalking and geophysical survey, and trial trenching.

ASZ8: Kings Bromley Manor quarry

6.3.8 This risk zone is located within the bounds of the now disused gravel quarry within the Kings Bromley Manor Park and is situated on river terrace deposits laid down by the River Trent during the Devensian glaciation. Prior to gravel extraction, the archaeological potential of this risk zone was high. Post-extraction, its residual potential is deemed to be negligible.

ASZ9: North-west of Echills

6.3.9 This risk zone is located on river terrace deposits laid down by the River Trent during the Devensian glaciation. As with similar deposits described above, they may have the potential to contain palaeoenvironmental and archaeological remains of Palaeolithic date, in both primary and secondary contexts. Once again, this risk zone falls within the study area of the Staffordshire Eastern Rivers Confluence NMP. The NMP revealed the ploughed down remains of a number of Early Bronze Age round barrows toward the south-eastern and, a fortiori, the north-western end of this zone. There are a number of very long Middle Iron Age pit alignments and at least two enclosures of possible Iron Age date within this risk zone, while a palimpsest of field boundaries throughout the zone could be of prehistoric to medieval date. There may be significant potential for the presence of buried archaeological remains of a variety of periods from the Mesolithic to the medieval period associated with settlement, burial and agriculture across this risk zone, since the remains of the open settlements and burials within flat cemeteries that were typical of most of these periods are not conducive to cropmark formation.

ASZ10: Trent Water Meadows

6.3.10 This risk zone comprises the alluvial floodplain of the River Trent. Holocene alluvium frequently contains palaeochannels, which are key contexts for understanding the physical evolution of the landscape, but also act as effective traps preserving both artefacts and ecofacts indicative of the surrounding environment and human activity. Some of the archaeological remains visible as cropmarks on aerial photographs on the River Trent terraces to the north-west and particularly to the south-east of this risk

zone (in ASZ 12 and ASZ9 respectively) and mapped by the NMP, such as the Early Bronze Age round barrows and Middle Iron Age pit alignments, would appear to terminate at the alluvium. In reality, they may continue towards the River Trent but be obscured from view by the alluvium. The alluvium could also mask any Bronze Age burnt mounds that may be present beside the River Trent, and could contain remains of, say, fish traps and landing stages of any date from prehistoric to medieval. This potential could be tested by means of geoarchaeological/ palaeoenvironmental coring and trial trenching.

ASZ11: Pipe Ridware

6.3.11 This risk zone is located on river terrace deposits laid down by the River Trent during the Devensian glaciation. The Ridware place name, various Domesday Book entries and scholarly extrapolation based upon them suggest that there may have been a settlement at Pipe Ridware since the 7th century AD, if not earlier. A former moat (FRC076) that lay adjacent to the present Pipe Ridware Hall is thought to have contained the residence of a prosperous freeholder in the 13th or 14th century, while earthworks that formerly lay to the north-west may be the remains of tenements abandoned in the late medieval period. Thereafter, the Reverend Stebbing Shaw illustrates a 17th century timber framed manor house and church[76]. Consequently, there may be significant potential for the survival of significant archaeological remains of early medieval to post-medieval date within this risk zone.

ASZ12: Pipe Ridware gravels

6.3.12 This risk zone is located on river terrace deposits laid down by the River Trent during the Devensian glaciation. As with similar deposits described above, they may have the potential to contain palaeoenvironmental and archaeological remains of Palaeolithic date. The NMP identified two ploughed down Early Bronze Age round barrows and many pits within this risk zone to the east of Pipe Ridware and a probable Iron Age square barrow and field system of probable Iron Age or Romano-British date to the west. This risk zone lies adjacent to ASZ11 and to cropmark remains of a possible Early or Middle Neolithic mortuary enclosure, Early Bronze Age round barrows, Middle Iron Age pit alignments and undated pits (FRC075). Consequently, there may be a high potential for encountering hitherto unidentified archaeological remains of prehistoric to early medieval date throughout this risk zone. This potential could be tested by means of geophysical and fieldwalking survey and trial trenching.

ASZ13: Blithbury

6.3.13 This risk zone is located on slightly acidic loamy and clayey soils developed on the Mercia Mudstone bedrock, with fairly extensive deposits of glacial till. There may be potential for important palaeoenvironmental, geoarchaeological and archaeological remains of Palaeolithic date to be preserved beneath the till. Conversely, there is little Palaeolithic potential where till deposits are absent. Archaeological potential more generally is likely to be substantially lower within this risk zone than in those located above river terrace deposits. This is because the soils that form upon mudstone geologies are heavier and damper and are therefore less amenable to primitive

[76] Shaw (1798)

ploughing technology. This constraint is likely to have been lifted in the Middle or Late Saxon period when the heavy mouldboard plough was introduced. The acidity of the soils that develop on Mercia mudstone geology is also an impediment to arable cultivation unless marled or limed. However, the soils within this and similar risk zones within the study area are only slightly acidic, so the acidity is unlikely to have constituted an absolute impediment to arable cultivation without the addition of lime. Surviving ridge and furrow earthworks indicate extensive arable cultivation in the medieval period within this and similar risk zones, even though the surviving evidence suggests marling did not become commonplace until the post-medieval period. Neither is soil acidity an impediment to pastoralism, rural industry and funerary, ceremonial and ritual activities. Consequently, there may be significant potential for encountering buried archaeological remains upon mudstone geologies, even if that potential is less than that of the river terraces. That there is some archaeological potential within this risk zone is suggested by the possible prehistoric or Romano-British cropmark enclosures located to the east of Woodhouse Farmhouse (FRC090), and the moated site of the medieval manor of Pipe Ridware (FRC088), which is located to the west of Woodhouse Farmhouse. The moated manorial site may have Middle or Late Saxon origins. The archaeological potential of this risk zone could be further tested by means of geophysical and fieldwalking survey and trial trenching.

ASZ14: Bentley Brook

6.3.14 This risk zone is located on slightly acidic loamy and clayey soils developed on the Mercia Mudstone bedrock, and contains extensive deposits of glacial till. There may be potential for important palaeoenvironmental, geoarchaeological and archaeological remains of Palaeolithic date to be preserved beneath the till. Conversely, there is little Palaeolithic potential where till deposits are absent. There may also be unmapped deposits of Holocene alluvium along the upper reaches of the Bentley Brook, which flows through this risk zone. Holocene alluvium can contain ecofacts that are indicative of the surrounding environment and human activity. They can also contain or seal archaeological sites such as Bronze Age burnt mounds, which have been identified in a similar context adjacent to Moreton Brook at Colton. Any burnt mounds would likely be accompanied by contemporary settlement, which would probably be located on higher ground within approximately 50m of the mound. The ploughed down remains of an Early Bronze Age round barrow (FRC094) survive as cropmarks to the south of Bentley Hall Cottage, while a Bronze Age axe or chisel was found by metal detectorists to the south of Bentley Hall Farm. Consequently, there may be potential for encountering further Bronze Age remains within the risk zone. A scatter of worked flints found to the east of Rake End contained lithics dating from the Late Mesolithic to the Bronze Age. These and the Neolithic ceremonial monuments located within the Trent Valley close to this risk zone suggest there may have been a resident population within or adjacent to this risk zone several millennia before the Bronze Age. The 'Hall' element of Bentley Hall Farm may suggest it has medieval origins. Consequently, there may be potential for encountering medieval settlement remains within ASZ14.The archaeological potential of this risk zone could be established through geophysical and fieldwalking survey, and trial trenching.

ASZ15: Colton

6.3.15 Once again, this risk zone is located on slightly acidic loamy and clayey soils developed on the Mercia Mudstone bedrock; it contains sporadic deposits of glacial till. There may be potential for important palaeoenvironmental, geoarchaeological and archaeological remains of Palaeolithic date to be preserved beneath the till. Conversely, there is little Palaeolithic potential wherever till deposits are absent. This risk zone falls within the study area of the Staffordshire Eastern Rivers Confluence NMP. The NMP did not identify any significant archaeological potential within the aerial photographic record of this risk zone. However, the Mercia Mudstone bedrock is far less conducive to cropmark formation than river terrace deposits, so the absence of significant cropmarks may not be sufficient evidence of a lack of archaeological potential within this zone. No other archaeological fieldwork is recorded within ASZ15 within the Staffordshire HER against which the absence of cropmarks can be checked. There may be potential for encountering archaeological remains of medieval date within this zone, which contains the site of the medieval manor house of Littlehay (FRC124) and part of the site of a medieval deer park (FRC130)[77]. There may also be archaeological remains related to the Colton's Middle or Late Saxon origins. The archaeological potential of this risk zone could be tested by means of geophysical and fieldwalking survey.

ASZ16: Colton Park

6.3.16 This risk zone is also located on slightly acidic loamy and clayey soils developed on the Mercia Mudstone bedrock; it contains occasional patches of glacial till. There may be potential for important palaeoenvironmental, geoarchaeological and archaeological remains of Palaeolithic date to be preserved beneath the till. Conversely, there is little Palaeolithic potential wherever till deposits are absent. The NMP did not identify any significant archaeological potential within this risk zone but, for the reasons given above, this may not be a wholly reliable indicator of its true archaeological potential. ASZ16 contains the probable site of one of the three medieval manors of Colton, which is thought to have stood on the site of the later Colton Hall, which occupied the site of the extant Colton Hall Farm (FRC172). The medieval manor is thought to have stood within a deer park (FRC153). Consequently, there may be potential for encountering archaeological remains of medieval date within the risk zone. The archaeological potential of this risk zone could be tested by means of geophysical and fieldwalking survey.

ASZ17: Rugeley Trent Valley

6.3.17 This risk zone comprises the Trent Valley floodplain to the north of Rugeley Power Station. It is located principally upon deposits of Holocene alluvium but contains a narrow strip of Devensian river terrace deposits to the west of Cawarden Springs Farm. Holocene alluvium frequently contains palaeochannels, which are key contexts for understanding the physical evolution of the landscape, but also act as effective traps preserving both artefacts and ecofacts indicative of the surrounding environment and human activity. The alluvium could mask Bronze Age burnt mounds, that may be present beside the River Trent (they were typically sited adjacent to

[77] C. Welch (pers comm) (2017)

watercourses), and could contain remains of, say, fish traps and landing stages of any date from prehistoric to medieval date. The river terrace deposits contain the cropmark remains of an enclosure of probable prehistoric date (FRC178) and of two Bronze Age round barrows and a linear boundary (FRC179). One of the barrows survives as a low earthwork. The potential for encountering significant buried archaeological remains associated with these known and any currently unidentified monuments is likely to be high. Geoarchaeological, palaeoenvironmental and archaeological potential could be assessed by means of geoarchaeological/ palaeoenvironmental coring, geophysical survey and trial trenching.

ASZ18: Rugeley Power Station

6.3.18 This risk zone is located upon river terrace deposits that were probably laid down during the Devensian glaciation. The light, well drained soils that form on river terrace deposits typically attracted occupation ranging in date from prehistoric to early medieval. The construction works associated with Rugeley Power Station are likely to have destroyed most of any archaeological remains that may once have existed at or near the ground surface, although some such remains could survive within relatively undeveloped areas within the risk zone. Conversely, there is much higher potential for the survival of more deeply buried archaeological or palaeoenvironmental remains of Palaeolithic date. Geoarchaeological, palaeoenvironmental and archaeological potential could be assessed by means of geoarchaeological/ palaeoenvironmental coring and trial trenching.

ASZ19: Hamley Heath

6.3.19 This risk zone is located predominantly upon slightly acidic loamy and clayey soils developed on the Mercia Mudstone bedrock, but also contains a band of glaciofluvial sand and gravel in the vicinity of Lea Hall Farm and Admaston, and occasional small patches of glacial till. The NMP did not identify any significant archaeological potential within this risk zone, and its slightly acidic soils are likely to mean it was not an area of primary settlement in prehistoric and early historic times. It may have some archaeological potential nonetheless. It lies adjacent to the Bronze Age burnt mounds at Lount Farm (FRC133) and the medieval glass-making furnace at the same location (FRC134). This risk zone could therefore contain remains of settlement associated with this industry, or contain the remains of other glass-making furnaces or other types of rural industry, such as charcoal burning, woodland management and woodland crafts. There is also documentary evidence of a mill on Hamley Heath in the 13th century[78]. The archaeological potential of this risk zone could be assessed by means of geophysical and fieldwalking survey, supplemented with targeted trial trenching of any high potential targets.

ASZ20: Moreton Brook

6.3.20 This risk zone contains a narrow band of alluvium on each flank of Moreton Brook. The alluvium has potential to contain stratified waterlogged archaeology and may contain interbedded organic (peat) horizons of high geoarchaeological potential. It may also contain or seal archaeological remains of prehistoric to medieval date. It's potential to

[78] Sykes, Carter and Bradbury (2008), p. 65

contain currently unidentified Middle or Late Bronze Age burnt mounds may be particularly high, as four burnt mounds (FRC133) have already been identified within the risk zone. There is significant potential for the presence of contemporary settlement within approximately 50m of any burnt mound. No such settlements have been identified within the study area to date. This risk zone also contains the remains of a medieval glass-making furnace (FRC134), and there may be potential for encountering other furnaces or other forms of industry, such as charcoal burning, which may have utilised the woodland resources that must have existed adjacent to the study area to fuel the glass-making industry. The first element of the place name Colton may itself derive the presence of a charcoal burning industry in the early medieval and medieval periods[79]. There may be potential for encountering well preserved remains of post-medieval water meadows in the north-western part of this risk zone. The potential for the survival of stratified waterlogged archaeology and any geoarchaeological potential could be assessed by means of geoarchaeological/ palaeoenvironmental coring and trial trenching. Any Bronze Age to medieval potential could be assessed by means of stream-walking, fieldwalking, geophysical survey and trial trenching. A walkover survey would probably be effective in identifying remains of any post-medieval water meadow, supplemented by earthwork survey and targeted excavation and recording of any associated structures.

ASZ70 – Hill Ridware Slopes

6.3.21 This risk zone is located almost entirely upon Devensian river terrace deposits laid down by the River Trent, although there is a thin band of Holocene alluvium flanking the River Trent. River terrace deposits may preserve floral and faunal remains of Palaeolithic date that are instrumental in providing information on past climates and environments and developing secure chronostratigraphic frameworks through both relative and absolute dating. They may also contain Palaeolithic activity sites or artefacts in primary or, more likely, secondary contexts. Holocene alluvium may have the potential to contain and seal remains of archaeological and palaeoenvironmental potential from several archaeological periods. This risk zone falls within the study area of the Staffordshire Eastern Rivers Confluence NMP. It has also been subject to several other aerial photographic surveys the results of which are recorded in the Staffordshire HER. These combined sources have identified the remains of a possible Neolithic mortuary enclosure within this risk zone to the west of Pipe Ridware and a possible Neolithic cursus monument to the east of Hill Ridware. The cropmark remains of a Neolithic causewayed enclosure survive to the east of Mavesyn Ridware, within 300m of this risk zone. This risk zone also contains the cropmark remains of at least three Bronze Age round barrows, several pit alignments of probable Iron Age date and of an adjacent group of undated pits or graves to the west of Pipe Ridware. The Ridware place name is likely to be indicative of settlement during the Middle Saxon period, although it is not known whether any such settlement remains may be present within this risk zone. The risk zone also contains the remains of a leat that supplied water to the former moat that surrounded a medieval predecessor of Pipe Ridware Hall and contains the remains of a former post-medieval water meadow. The monuments described above confirm that the well-drained soils that formed upon the river terrace deposits within this risk zone have been attractive to communities from

[79] Horovitz (2005), pp. 203-204

at least the Neolithic to the medieval period. Consequently, there may be potential for encountering buried archaeological remains associated with communal, ritual, funerary, settlement and farming related activities and monuments from a variety of archaeological periods within this risk zone. This potential could be assessed by means of geoarchaeological/palaeoenvironmental coring, fieldwalking, geophysical survey and trial trenching.

7 Analysis and research potential

7.1 Introduction

7.1.1 A good general understanding of the character and significance of the archaeology within the study area can be reached using desk based sources and taking into account additional factors such as topography, geology, historic character and distribution of known archaeological finds, sites and assets.

7.2 Research potential and priorities

7.2.1 An Archaeological Research Framework for the West Midlands[80] provides an introduction to key research themes in the region by period. Reflecting the potential of the land required for the Proposed Scheme in this area, and drawing on the general themes identified in the published research framework, the following questions could provide a focus for further investigation carried out in this study area in terms of period based and multi-period based research.

General

7.2.2 Assess by means of geophysical survey and intrusive investigations whether and to what extent the variable presence of cropmarks within the study area represents a real distinction in patterns of past activity or whether and to what extent it is a function of geology. Extensive and dense cropmark complexes are visible on the sand and gravel terraces of the River Trent, and are less dense on the fluvioglacial sands and gravels between Fradley and Handsacre, and less dense upon mudstone geologies.

7.2.3 What is the archaeological, geoarchaeological and palaeoenvironmental research potential of the Pleistocene gravels associated with the River Trent; and the Holocene alluvium lining the Pyford Brook, Bourne Brook, River Trent and Moreton Brook?

7.2.4 Establish the chronostratigraphic framework of the study area and assess how it impacts upon the preservation and visibility of the cultural and environmental record, by means of geoarchaeological/palaeoenvironmental coring.

7.2.5 How has the natural landscape evolved during the Quaternary period and how has this affected and presented opportunities for human communities?

Early and late prehistory

7.2.6 What is the potential of the superficial deposits within the study area (principally the terrace deposits associated with the River Trent) to yield information on human activity within the Palaeolithic period and upon the environment within which Palaeolithic communities acted?

7.2.7 Is the low incidence of Mesolithic artefacts within the study area reflective of the inadequate amount of surface survey undertaken there, or of a dearth of Mesolithic activity? Elsewhere within the West Midlands, Mesolithic sites would appear to correlate with elevated, well-drained land close to a water source. The Trent Valley in

[80] Watt, S., ed (2011), *The Archaeology of the West Midlands: a framework for research,* Oxford: Oxbow Books

particular satisfies the second and third of these conditions. Could Mesolithic sites be buried beneath alluvial deposits associated with the watercourses within the study area?

7.2.8 There are several Early or Middle Neolithic ceremonial and ritual monuments within or immediately adjacent to the study area, namely the causewayed enclosures at Mavesyn Ridware and to the north-west of Fradley (FRC003), a possible causewayed enclosure to the west of Glebe Farm, Kings Bromley and a second enclosure of similar size and shape approximately 150m to the west (FRC044), a possible mortuary enclosure to the west of Pipe Ridware (FRC075), and a cursus monument to the east of Hill Ridware (FRC162). There are also several Middle and Late Neolithic ceremonial and ritual monuments at the confluence of the River Trent and the River Tame. Are there any additional, currently unidentified Neolithic ceremonial or ritual monuments present within the study area? Are any of these of Late Neolithic date, or might here have been a shift in focus away from the study area towards the confluence of the River Trent and the River Tame in the Late Neolithic, and perhaps to river confluences in general?

7.2.9 Were the Neolithic communities that used the ceremonial and ritual monuments resident within the study area? Do the remains of their settlements, agricultural economy and burials survive? Might some of these survive beneath the alluvial deposits that flank some of the watercourses within the study area?

7.2.10 When did round barrow burial begin and end within the study area? Are any associated with Neolithic or Beaker burials?

7.2.11 How did the round barrow burial rite evolve over time?

7.2.12 Were round barrows typically of single- or multi-phase construction? What was the incidence of secondary burial with barrow mounds within the study area?

7.2.13 It has been conjectured that round barrows within a river valley context were sited close to contemporary settlements. Does any evidence of contemporary settlement survive adjacent to the plethora of ring ditches visible as cropmarks on aerial photographs principally upon the terrace deposits of the River Trent?

7.2.14 Is there any surviving evidence within the study area that ceremonial monuments and particularly round barrows acted as foci for repeated ceremonial activities that are likely to have extended beyond the physical limits of the monuments and may have linked several monuments together?

7.2.15 Are there any surviving remains of Middle Bronze Age to Early Iron Age date within the study area and particularly upon the terrace deposits flanking the River Trent? None are visible in the cropmark data, but these periods may have been characterised by open settlements and burial within flat cemeteries the remains of which are typically not conducive to cropmark formation.

7.2.16 Are there any remains of Bronze Age burnt mounds adjacent to watercourses within the land required for the Proposed Scheme (there are four such sites elsewhere within the study area beside the Moreton Brook, Colton, while between 40 and 50 such mounds are known within Birmingham and the Black Country and a further 17 are known within Staffordshire)? If so, when were burnt mounds and associated structures built and used within the study area and are there adjacent, any

contemporary settlement remains (it is hypothesized that such remains may be present on slightly higher and drier ground within approximately 50m of a burnt mound)?

7.2.17 When were the pit alignments that are visible within the study area in profusion upon the terrace deposits of the River Trent first constructed and for how long were they maintained and used? Excavations at the River Trent – River Tame confluence and along the line of the M6 Toll suggest that regionally they date to the Middle Iron Age.

7.2.18 What was the form and function of pit alignments within the study area? The cropmark data suggests they may have performed a number of different functions. Some defined long, linear boundaries perhaps associated with stock management, others defined rectilinear fields, while others circumscribed rectilinear and curvilinear enclosures.

7.2.19 Did the pit alignments within the study area constitute the earliest land boundaries at that location, or is there any evidence that they fossilized the lines of earlier, more ephemeral boundaries? Conversely, what is the evidence that pit alignments, perhaps re-excavated as continuous ditches, continued to structure the landscape into historic times?

7.2.20 What is the evidence for Iron Age settlement within the study area? Are the numerous predominantly rectilinear ditched enclosures and enclosures defined by pit alignments, visible as cropmarks within the study area, principally upon the River Trent terraces but also to the north of Pipe Ridware, settlement enclosures of Iron Age date? They would appear to conform fairly closely in size and shape to ditched enclosures excavated at the River Trent – River Tame confluence and along the route of the M6 Toll, which were found to be Iron Age settlement enclosures that contained the remains of single or multiple roundhouses.

Romano-British

7.2.21 What is the evidence for Romano-British settlement within the study area? Is there any evidence for the Romanization of farmsteads (none is visible in the cropmark evidence within the study area) or did farmsteads continue to be built in the native tradition?

7.2.22 Was there continuity or change in the rural economy in general and field systems in particular during and after the transition from the Iron Age to the Roman period? At the River Trent – River Tame confluence, Iron Age farmsteads engaged in mixed, subsistence agriculture would appear to have been superseded by stock ranching, perhaps controlled from a villa located to the west of Barton-under-Needwood. There is no evidence for such a change in the cropmark data within the study area, but there may have been a Roman villa at Curborough that could have exercised similar control.

7.2.23 To what extent was a Romanised material culture adopted by communities resident within the study area?

Early medieval

7.2.24 Are there any surviving remains of early medieval settlement and land use within the study area? Place-name evidence indicates the presence of both British and English settlement within one or more of the Ridwares (Hamstall, Pipe or Mavesyn) in the

early or middle part of this period, while Domesday Book suggests it may have been located at Pipe Ridware (and at Handsacre). There is currently no place-name or other evidence of Danish settlement or land use within the study area.

7.2.25 Was settlement and farming restricted to the lighter, well drained soils that formed upon river terrace deposits within the early part of this period? If so, when were the heavier and wetter soils on the plateaux and interfluves settled and farmed?

7.2.26 When was an anglicized material culture adopted within the study area? Is there any evidence for pagan burial?

Medieval

7.2.27 To what extent was the medieval settlement pattern within the study area nucleated and to what extent dispersed? What was the chronology of nucleation?

7.2.28 What was the extent and chronology of settlement contraction and desertion in the later medieval period?

7.2.29 To what extent were field systems open during the earlier part of this period and what was the chronology of their enclosure during the later part thereof?

7.2.30 To what extent was material culture manufactured within the region's towns used within its rural settlements?

7.2.31 There is evidence of medieval glass-working within the study area at Lount Farm, Colton. Is there any evidence for rural industry within the land required for the Proposed Scheme?

7.2.32 The grid supply from Rugeley Power Station will run close to Colton Hall Farm, which is thought to be on the site of one of the three manorial centres within Colton, and through a possible associated deer park. Do any remains of the medieval manorial centre extend into and do any remains of the earthen bank that would have enclosed the deer park survive within the land required for the Proposed Scheme? When did the deer park go out of use?

Post-medieval and modern

7.2.33 What was the chronology of the piecemeal enclosure of fields within the study area?

7.2.34 Is there any evidence for rural industry within the study area?

7.2.35 To what extent did the arrival of the Trent and Mersey Canal lead to landscape change within the study area?

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